

UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

* * * * *

GARY SUOJA, Individually and as
Special Administrator for the Estate
of OSWALD F. SUOJA, Deceased,

Plaintiff,

Case No. 99-cv-475-SLC

vs.

Madison, Wisconsin

December 1, 2015

OWENS-ILLINOIS, INC.,

1:00 p.m.

Defendant.

* * * * *

STENOGRAPHIC TRANSCRIPT OF SECOND DAY OF COURT TRIAL
AFTERNOON SESSION
HELD BEFORE MAGISTRATE JUDGE STEPHEN L. CROCKER

APPEARANCES:

For the Plaintiff:

Cascino Vaughan Law Offices, Ltd.
BY: ROBERT G. MCCOY
DANIEL B. HAUSMAN
220 S. Ashland Avenue
Chicago, Illinois 60607

For the Defendant:

Schiff Hardin LLP
BY: EDWARD M. CASMERE
BRIAN O'CONNOR WATSON
233 South Wacker Drive
Suite 6600
Chicago, Illinois 60606

CHERYL A. SEEMAN, RMR, CRR
Federal Court Reporter
United States District Court
120 North Henry Street
Madison, Wisconsin 53703
1-608-255-3821

I-N-D-E-X

<u>DEFENDANT'S WITNESSES</u>	<u>EXAMINATION</u>	<u>PAGES</u>
PETER NEUSHUL	Direct by Mr. Casmere	3-23
	Cross by Mr. McCoy	23-80
EARL GREGORY	Direct by Mr. Watson	81-115
	Cross by Mr. McCoy	116-147
	Redirect by Mr. Watson	148-149

E-X-H-I-B-I-T-S

<u>PLAINTIFF'S EXHIBITS</u>	<u>IDENTIFIED</u>	<u>RECEIVED</u>
Ex. 32 - Invoice	30	-
Ex. 37 - Final Investigation Report	56	-
Ex. 38 - 3/12/43 Gardner Letter	51	-
Ex. 39 - Special Hazards Study	62	-
Ex. 41 - 10/30/48 Interim Report	53	-
Ex. 138 - Kaylo Promotional	143	-

DEFENDANT'S EXHIBITS

Ex. 1162 - Gregory Report	117	-
Ex. 1163 - Gregory Supplemental	117	-
Ex. 1164 - Gregory CV	81	81
Ex. 1198 - Hierarchy of Controls	100	-
Ex. 1258 - Federal Register	93	-
Ex. 1944 - 1956 Industrial Hygiene Quarterly	148	-

* * *

1 (Called to order)

2 THE COURT: All right. Welcome back everyone.

3 Anything preliminary before we continue with the direct?

4 Are we good? All right.

5 MR. CASMERE: Thank you, Your Honor.

6 DIRECT EXAMINATION

7 (Continued from recess.)

8 BY MR. CASMERE:

9 Q. Dr. Neushul, Professor Drinker's study in 1946, was
10 that the first large-scale epidemiological study of the
11 users of finished insulation products that was published
12 anywhere in the world?

13 A. Yes, it was.

14 Q. What was the next large-scale epidemiological study
15 published on the health effects of insulation workers;
16 when was that next published after 1946?

17 A. That's not going to happen until the mid 1960s when
18 Dr. Irving Selikoff's work is published.

19 Q. Can you pull that microphone a little closer?

20 A. Sorry.

21 Q. Between 1946 and the mid 1960s, was there any
22 publication in the peer-reviewed literature in the world
23 that said that the conclusions in Fleischer-Drinker were
24 wrong?

25 A. No.

1 Q. I'm going to skip next very briefly to the *Journal*
2 *of American Medical Association* in 1949. What's
3 significant about this in the state of the art?

4 A. Well, it's making clear that there have been cases
5 of asbestosis in lung cancer and that you have to have
6 asbestosis or asbestosis is a requirement if you are
7 going to see lung cancer.

8 Q. Explain what that means.

9 A. Over time with the disease asbestosis we began to
10 see case studies where there were instances of cancer in
11 people that had asbestosis. And so it takes quite some
12 time before there will not be a -- before that
13 connection, until the 1960s, before people will say that
14 you could conceivably have lung cancer without
15 asbestosis.

16 Q. Was it considered in the 1940s and 1950s and even
17 into the 1960s that in order for someone to get a cancer
18 from asbestos that they had to first suffer from the
19 disease asbestosis?

20 A. That's correct.

21 Q. What does that mean, in terms of the idea if you
22 protect against asbestosis, what does that mean?

23 A. Well, it means that if you follow, for example, some
24 of the guidelines that appeared in the 30s with
25 Merewether, if you follow the threshold limit value that

1 is propagated in 1938 that we talked about earlier and
2 that will be dispersed by the ACGIH beginning in 1946, we
3 have 5 million particles per cubic foot, which was
4 believed if you broke below that you could not contract
5 asbestosis. And if you eliminated asbestosis, then you
6 would not see a lung cancer.

7 Q. The *Journal of American Clinical Pathology* in 1955,
8 that editorial by Dr. Hueper, is that an example of what
9 you're talking about in terms of the presence of
10 asbestosis being a prerequisite to any subsequent
11 development of cancer?

12 A. That's correct. Wilhelm Hueper would track
13 potential carcinogens. And in this case he's concluding
14 that this is a potential carcinogen, but only if you have
15 asbestosis, if you contract an asbestosis.

16 Q. For whom did Dr. Hueper work in the 1950s?

17 A. He worked for the U.S. Government.

18 Q. The National Cancer Institute?

19 A. That's correct.

20 Q. I want to also talk about a 1955 study by Richard
21 Doll. Can you tell the Court who Richard Doll was?

22 A. Richard Doll is the preeminent epidemiologist of the
23 20th century. He's the scientist who, through a study of
24 British doctors, showed that smoking causes lung cancer.
25 So he's very very well known. And this study that he

1 does is a result of seeing many cases of -- seeing cases
2 of asbestosis, cases of asbestosis in combination with
3 lung cancer. And so he conducts a study to see, you
4 know, is there a connection here.

5 Q. What did Dr. Doll conclude?

6 A. He concludes that there is a connection between
7 asbestosis and lung cancer.

8 Q. Did he conclude anything about the working
9 conditions that the people were in and how that led or
10 did not lead to the development of their disease?

11 A. He does look at the cases and the conditions which
12 the workers were working within and notes that the cases
13 that he's seeing came before measures were put in place,
14 as a result of Merewether, to reduce dust in the
15 workplace to keep it at a safe level.

16 So he'll conclude at the end that, yes, there is a
17 connection. But because the dusty conditions that people
18 contracted asbestosis in have been taken care of, you
19 will not see lung cancer increasing as a result of
20 exposure to asbestos.

21 Q. The Asbestos Worker Journal in 1957, how does that
22 contribute to the development of knowledge and the
23 dispersion of knowledge on the hazards of asbestos?

24 A. Well, it shows that this organization is, the one
25 that we talked about earlier, in the 1930s, has continued

1 to monitor potential health hazards of asbestos and is
2 aware of them.

3 Q. Who received the *Asbestos Worker Journal*?

4 A. That goes to all union members.

5 Q. Which union?

6 A. The Asbestos Workers Union.

7 Q. The union that Mr. Suoja was a member of?

8 A. That's correct.

9 Q. A couple more here. In terms of Dr. Wagner, which
10 is spelled W-A-G-N-E-R, but pronounced *Wagner*, correct?

11 A. That's correct.

12 Q. What did Dr. Wagner do in terms of the state of the
13 art?

14 A. Dr. Wagner studies a group of cases of a special
15 cancer he determines is called mesothelioma in South
16 Africa and publishes a paper in 1960.

17 Q. Prior to Dr. Wagner's work that was published in
18 1960, had there been any connection in the peer-reviewed,
19 published literature between exposure to asbestos and
20 this disease mesothelioma?

21 A. No. This paper is looked upon as the seminal piece
22 in terms of reviewing the connection between asbestos and
23 mesothelioma.

24 Q. What group of workers was Dr. Wagner looking at in
25 this study?

1 A. He's looking at people working in mines and people
2 living in the vicinity of mines.

3 Q. Where were those mines located?

4 A. In South Africa.

5 Q. 1961, the *Asbestos Worker Journal*, are you familiar
6 with the *Grim Reaper* advertisement?

7 A. That's correct. This is an illustration that was
8 created in '57, but appears in 1961 in the *Asbestos*
9 *Workers Journal*.

10 Q. Can you provide the Court with a little bit of
11 context for how this came about?

12 A. This is produced by a union worker or supervisor at
13 Long Beach Naval Shipyard. So it's created by a
14 government entity, but it's appearing in the *Asbestos*
15 *Workers Union*.

16 Q. This appeared on the back page of the November 1961
17 *Asbestos Worker Journal* that went to the home of every
18 card-carrying member of the *Asbestos Workers Union*?

19 A. That's correct.

20 Q. Did the *Asbestos Worker Journal* continue to publish
21 information about the health hazards of asbestos in the
22 1960s?

23 A. They did. The union cooperated with Irving Selikoff
24 on his seminal research on lung cancer, and he actually
25 addressed the union on a number of occasions, and his

1 paper was I think serialized actually in the journal.

2 Q. Who was Dr. Irving Selikoff?

3 A. Dr. Irving Selikoff is the preeminent researcher --
4 asbestos disease researcher of the 20th century. He's a
5 very eminent doctor.

6 Q. What is the Lasker Prize or the Lasker Award?

7 A. That's the equivalent of the Nobel Prize for
8 medicine. I don't believe there is one for medicine. So
9 here in the United States, winning the Laker Prize is
10 something that I believe -- I mean, obviously he won it,
11 but he got it for looking at a treatment for
12 tuberculosis. Isoniazid, I believe it was.

13 But he did clinical studies of people that had TB
14 and it was using some of the new antibiotics that came
15 after World War II on the heel of penicillin. And I
16 believe in those clinics is where he may well have seen
17 people that had asbestos-related disease and that may
18 have been -- led him to his further research in that
19 area.

20 Q. What is the Cummings Award?

21 A. The Cummings Award is the -- sort of a lifetime
22 achievement award for members of -- for industrial
23 hygienists, the American Industrial Hygiene Association.

24 Q. Did Philip Drinker win the Cummings Award?

25 A. Yes, he did.

1 Q. Did Alice Hamilton win the Cummings Award?

2 A. Yes, she did.

3 Q. Did Willis Hazard, Owens-Illinois's industrial
4 hygienist, win the Cummings Award?

5 A. Yes, he did.

6 Q. Again, the issue about the asbestosis being a
7 prerequisite for the subsequent development of cancer,
8 did the U.S. Department of Health, Education and Welfare
9 publish anything about that?

10 A. They did. This paper here points out that in 1964
11 there's still some indecision about the connection
12 between asbestosis and cancer, although they're certainly
13 leaning in that direction.

14 Q. In 1968 Dr. Selikoff published a seminal piece of
15 work called *Asbestos Exposure, Smoking and Neoplasia*,
16 correct?

17 A. That's correct.

18 Q. And what did this add to the development of
19 knowledge about asbestos exposure and injury?

20 A. Well, I think the point he's trying to make in this
21 paper is that there's a symbiosis between smoking and
22 exposure to asbestos. And I know he personally addresses
23 the union and says you must stop smoking because you're
24 going to vastly increase your chance of contracting lung
25 cancer.

1 Q. Would it be accurate to say that Dr. Selikoff's work
2 in conjunction with the asbestos workers in the mid 1960s
3 identified the fact that workers who were using these
4 types of products were starting to come up with diseases
5 related to asbestos?

6 A. That's correct.

7 Q. And Dr. Selikoff then raised the issue of whether --
8 of why they were getting these diseases?

9 A. Yes, he did.

10 Q. Did Dr. Selikoff's work then raise the questions of
11 either: (a) is the exposure level that we thought that
12 these workers were having higher than we thought; or (b)
13 is the exposure level what we thought, it's just not as
14 safe as we thought?

15 A. Yeah. He begins to question the threshold limit
16 value. And he's citing in this paper the '46 Drinker
17 study, which was this large study of insulators that
18 occurred before and determined that that occupation was
19 in conditions below the TLV. And so he's beginning to
20 question whether the TLV is actually adequate in terms of
21 preventing disease.

22 Q. And how about Dr. Cooper and Leroy Balzer in 1968,
23 do they come to the same conclusions about the exposures
24 in the past being below the TLV for members of this
25 union?

1 A. They do. In a way they're testing the testing of
2 Fleischer, Drinker, Gade and Viles; did they not get
3 incorrect dust counts when they went through these ships
4 and looked at this. And they conclude that they are,
5 that in fact it is below 5 million particles per cubic
6 foot.

7 Q. Did Dr. Selikoff publish industrial hygiene progress
8 reports in the *Asbestos Worker Journal*?

9 A. He did. He's a scientist who crossed over from
10 *ivory tower* into other parts of our society. He
11 addressed workers and he put information in the *Asbestos*
12 *Workers Journal*. And again, I don't think he could have
13 achieved what he did scientifically without the
14 cooperation of the Asbestos Workers Union.

15 Q. Were those reports in any particular color?

16 A. They're called *Green Sheets* and I believe that they
17 appeared at the back and the color was green.

18 Q. Did Dr. Selikoff report on how successful he was in
19 convincing insulators to use respiratory protection?

20 A. Yes, he did.

21 Q. And what did he conclude?

22 A. It was not successful.

23 Q. Why not?

24 A. It's very -- historically, going all the way back to
25 the 30s and before -- it's very very difficult to get

1 someone to wear a respirator.

2 Q. All right. Thank you, Doctor. I want to now shift
3 gears very quickly because I believe that Mr. McCoy will
4 ask you some more specific questions about these areas.
5 But I want to talk to you about Owens-Illinois and the
6 Saranac Laboratory briefly. Can you tell the Court what
7 the Saranac Laboratory was and why it shifted?

8 A. The Saranac Laboratory is in Saranac Lake, New York.
9 It is the leading laboratory for the study of
10 dust-related disease during the early to mid 20th
11 century.

12 Q. The Owens-Illinois Glass Company, can you just
13 briefly describe who that was or what that was during the
14 1930s, 40s and 50s?

15 A. Well, Owens-Illinois exists because of a fellow
16 named *Michael Owens* inventing the bottle-making machine;
17 in other words, we don't blow bottles anymore, which is a
18 very dangerous activity. He created a machine by 1909
19 that was capable of making I think nine bottles a minute.
20 So that's the basis for this company, that they make
21 glass. And it's specifically glass containers.

22 And they'll partner with another company called
23 *Libby* and the names will change, but that's the origins
24 of this company. And during the 1940s they're still
25 doing that. They make glass land mines in World War II,

1 maybe some other things with glass. But they're a glass
2 company.

3 Q. Glass bottles, beer bottles, wine bottles; is that
4 right?

5 A. Exactly.

6 Q. Is that still the main business of the company
7 today?

8 A. I believe today that the company is diversified into
9 plastics, but they still do make glass bottles.

10 Q. Did Owens-Illinois have any connection with the
11 Saranac Laboratory before the studies on Kaylo?

12 A. Yes, they did.

13 Q. Can you explain to the Court what that was briefly?

14 A. Well, they were making glass all over the United
15 States and glass is made from silica and silica causes
16 silicosis. And indeed silica is a component of the new
17 product that they'll make from '48 to '58 and it's a
18 potentially hazard material that can cause this disease
19 *silicosis*, which is a fibrosis of the lungs.

20 Q. What's the connection between silicosis and
21 tuberculosis and the Saranac Laboratory?

22 A. Well, tuberculosis comes up in all of these studies
23 because there was great concern if you're working in
24 dusty conditions, if one of your employees has TB and
25 they cough and the tubercle bacillus lands on dust, and

1 the next worker then breathes in that dust, you can have
2 a spread of TB that will be increased as a result of
3 working in a dusty environment; hence the need to control
4 dust to prevent not just silicosis, but the really big
5 problem, which is TB.

6 Q. So Owens-Illinois invented this new product called
7 *Kaylo*, calcium silicate insulation, right?

8 A. They -- they -- you know, yes, they create a new
9 product, a new insulation. It's a new division for them.
10 It's not a bottle obviously. So they're making calcium
11 silicate.

12 Q. All right. Did they ask the Saranac Laboratory to
13 test it?

14 A. Yes, they do.

15 Q. Did the Saranac Laboratory test it?

16 A. Yes.

17 Q. Over how many years?

18 A. It begins in '43 and the published results of the
19 study will appear in '55.

20 Q. Did the Saranac Laboratory, when it published its
21 results in 1955, that was published where?

22 A. I believe it was in *Archives of Environmental*
23 *Health*. It's an industrial -- not an industrial hygiene,
24 but a natural sort of thing. It's scientific journal.

25 Q. Is there any evidence in the historical record that

1 Owens-Illinois edited or in any way changed or even knew
2 that the Saranac Laboratory was going to publish that
3 result when it did?

4 A. They encouraged them to publish it, but we're not
5 told that it was published and we're surprised when they
6 received a copy of it.

7 Q. Is there any evidence that Owens-Illinois edited a
8 single word in that published document from the Saranac
9 Laboratory?

10 A. They had no idea it was even being prepared.

11 Q. Did the Saranac Laboratory do things other than just
12 test the Kaylo product itself on animals?

13 A. Yes. It was discovered that the asbestos component
14 of Kaylo remained as asbestos after going through this
15 process of creating the calcium silica. And Saranac
16 Laboratory said, "Well, if you have a" -- "you have a
17 potential component of this. It could be hazardous. You
18 need to make sure that in your plant that things are
19 safe." Of course they're using silica there as well.
20 That's a significant component of Calsil.

21 So Saranac came out to do a health survey at
22 Owens-Illinois's invitation. And they suggested it and
23 Owens-Illinois brought them out there to do a health
24 survey. Now, of course I believe Saranac had done this
25 for silica plants for them, but they had now did this for

1 this new product.

2 Q. Did Saranac Laboratory review any x-rays of workers
3 of Owens-Illinois at the Kaylo plant?

4 A. Yeah. They put -- we had an x-ray program where the
5 x-rays would be read by Saranac, but they had had a
6 similar arrangement with them for work on silicosis as
7 well.

8 Q. Did the Saranac Laboratory ever find, during the
9 entire time Owens-Illinois manufactured Kaylo, a single
10 Kaylo plant worker that had any asbestos-related disease?

11 A. They did not.

12 Q. Did the Saranac Laboratory make recommendations to
13 Owens-Illinois about what type of dust suppression
14 techniques it should use in its plants?

15 A. They did. They did a very detailed survey. They
16 sent out a couple of hygienists who went through the
17 whole process. And, you know, if there was an area where
18 dust counts were high, they recommended measures be taken
19 to prevent any possibility that they'd be above the TLV.

20 Q. Did Owens-Illinois follow those recommendations?

21 A. Yes, they did.

22 Q. Is there any recommendation made by the Saranac
23 Laboratory that Owens-Illinois did not follow?

24 A. No. They followed the recommendations of Saranac.

25 Q. Did the Saranac Laboratory ever tell Owens-Illinois

1 that it should stop making Kaylo?

2 A. They did not.

3 Q. Did the Saranac Laboratory ever tell Owens-Illinois
4 that it should take asbestos out of Kaylo.

5 A. No, they did not.

6 Q. Did Saranac Laboratory ever recommend to
7 Owens-Illinois that they place a warning on the product?

8 A. No, they did not.

9 Q. Did -- why did the Saranac Laboratory and
10 Owens-Illinois want to study this calcium silicate
11 material in the first place; what was the point?

12 A. At the beginning I believe they wanted to find out
13 whether the materials that they were using in it changed
14 as a result of this heating process that the combination
15 went through. It's silica, there's an asbestos
16 component, there's diatomaceous earth; there's a series
17 of different things that are potentially lined -- that
18 are potentially hazardous: what happened to that after
19 the process. And so they send dust from the cut-up
20 material to Saranac to have them tested: what are the
21 potential health consequences of this.

22 Q. Now, the exposure levels of the studies, were they
23 at the 5 million particle per cubic foot level?

24 A. They were -- these are experiments with three
25 different types of animals and they were far far in the

1 hundreds of million -- over a hundred million particles.
2 They're trying to create as dusty an environment. And
3 this is a protocol that was involved at Harvard by Cecil
4 Drinker, who's Philip Drinker's brother, and his
5 sister-in-law, Catherine Drinker, for putting animals in
6 a situation where you could expose them to as much dust
7 as possible.

8 Q. Does Saranac Laboratory expose the animals for the
9 lifetime of the animal to 20 times the TLV; is that
10 right?

11 A. That's correct.

12 Q. What did they find after all this? Did the silica
13 change during the manufacturing process?

14 A. Initially they thought that everything had changed
15 because there is no asbestosis appearing in the animals
16 in the first phase of experiments, so they thought that
17 everything had changed.

18 But they continue the experiment, at
19 Owens-Illinois's request, because they're interested in
20 looking at TB, looking at some impact on TB in animals,
21 because obviously they're worried about that in their
22 facility. And as the studies continued, they learned
23 that while the silica had become a silicate, it was no
24 longer potentially harmful, the asbestos had not.

25 Q. The asbestos stayed asbestos?

1 A. Stayed asbestos, was still potentially hazardous.

2 Q. The level that Saranac Laboratory suggested
3 Owens-Illinois maintain for exposure to its employees at
4 the Kaylo manufacturing plant was what?

5 A. 5 million particles per cubic foot.

6 Q. If Owens-Illinois kept its employees at that level,
7 what was supposed to happen to those employees?

8 A. Well, you should, if you were below the TLV, you
9 should not contract asbestosis working an eight-hour day,
10 40-hour workweek. So it's a minimum level that if you
11 keep it -- keep your working conditions below that,
12 you're not -- you're believed not to contract asbestosis.

13 Q. At that time, if you were believed to be protecting
14 against asbestosis, was it also believed that you would
15 protect against any other asbestos-related disease?

16 A. That's correct.

17 Q. What level did the State of New Jersey recommend
18 that Owens-Illinois keep its manufacturing plant
19 exposures at?

20 A. The State of New Jersey, the State of Wisconsin, all
21 states ascribe to the threshold limit value produced by
22 the American Conference of Governmental Industrial
23 Hygienists on their threshold limit value list beginning
24 in 1946 of 5 million particles per cubic foot.

25 Q. The Kaylo manufacturing plant was in New Jersey?

1 A. That's correct.

2 Q. Now, the information that Owens-Illinois had about
3 the potential hazards of asbestos in the 1940s and 1950s,
4 was that any different than the information that was
5 published in the Merewether and Price article in 1930?

6 A. No.

7 Q. Was it any different than what was published by the
8 United States Public Health Service and *Public Health*
9 *Service Bulletin 241* in 1938?

10 A. No.

11 Q. Was it any different than the information that was
12 provided in the Wisconsin Industrial Commission TLV
13 adoption in 1947?

14 A. No.

15 Q. Was it any different than what was published by the
16 United States Government and adopted in the Walsh-Healey
17 Act in 1951?

18 A. No.

19 Q. Finally, we touched on this during your review of
20 the state of the art, but the Asbestos Workers Union, is
21 there a union in the country prior to 1965 -- or strike
22 that. 1958, when Owens-Illinois got out of the business
23 in 1958, did the Asbestos Workers Union know that
24 exposure to asbestos could cause asbestosis?

25 A. I think that there was an awareness of that since

1 the 1930s.

2 Q. Did the Asbestos Workers Union have knowledge and
3 publish on the ways to reduce those exposures?

4 A. There are -- there was a Medical Committee. There
5 were measures, as we've seen, that it was known that you
6 should wear a respirator.

7 Q. Did Owens-Illinois have knowledge that was superior
8 to the Asbestos Workers Union about the potential health
9 hazard of asbestos?

10 A. I don't believe there is anything Owens-Illinois
11 could have told this very old and distinguished union
12 about the potential hazards of asbestos.

13 Q. How about the owners of Badger Ordinance Work, the
14 United States Government?

15 A. The United States Government participated in most of
16 the studies that resulted in our knowledge of the
17 potential asbestos hazards. So, no, there's nothing they
18 could tell the United States Government.

19 Q. Was the onus put on plant owners or employers at the
20 worksite who are monitoring the type of activity to
21 insure that the TLVs were complied with?

22 A. In the -- during the 1950s it was the responsibility
23 of the controller of the workplace to maintain those --
24 insure that the conditions were not hazardous.

25 Q. And why is that?

1 A. Because they -- especially, for example, at Badger
2 Ordinance Works, you're not going to get in there unless
3 you're allowed in there. It's a munitions facility which
4 had all kinds of safety measures in place because you
5 want to avoid accidents. But that facility was under the
6 control of the owner/operator of it. And safety, as we
7 know, was a component of the protocol set there,
8 including use of respirators.

9 MR. CASMERE: Thank you, very much, Dr. Neushul.
10 Those are all the questions I have for you at this time.

11 THE COURT: All right. Cross-exam.

12 MR. MCCOY: Thank you.

13 MR. CASMERE: Do you want the Elmo?

14 MR. MCCOY: Yeah. Switch to us.

15 MR. CASMERE: Is your screen on there,
16 Dr. Neushul?

17 THE WITNESS: Yes, it is.

18 CROSS-EXAMINATION

19 BY MR. MCCOY:

20 Q. Dr. Neushul, just kind of a preliminary question:
21 Are you doing more surfing than teaching these days?

22 A. You know, I love to surf as much as I can. I'm
23 getting a little old, but I still do it.

24 Q. All right. And you're not teaching anymore, right?

25 A. I have not taught lately, no.

1 Q. How much a year do you get from testifying in
2 asbestos cases?

3 A. From testifying, probably -- I rarely testify, so
4 probably less than \$4,000, on average.

5 Q. How about from all of the consulting work that you
6 do on asbestos cases?

7 A. It varies from year to year. It could be as much as
8 \$80,000 or it could be less than \$50,000.

9 Q. Okay. Somewhere between 50 and 80, right?

10 A. It really depends on the year.

11 Q. Okay. And you started doing the work with the
12 asbestos cases back in 2001, right?

13 A. I believe that's when I started.

14 Q. Okay. And before that time, you hadn't had any
15 experience with asbestos, right?

16 A. I knew what it was, but I had no experience with the
17 litigation at all.

18 Q. And you hadn't reviewed the asbestos literature
19 before, right?

20 A. No.

21 Q. Okay. You were doing other kinds of projects. I
22 think you talked about a few other fields, right?

23 A. Well, I worked on the War Production Board for my
24 dissertation and I had seen asbestos. There's a part of
25 that WPB called the *Asbestos Cork Section*, so I had

1 looked that, but not in view of looking at litigation.

2 Q. And that was it for asbestos?

3 A. That, before 2001, that was it.

4 Q. So now the lawyers that first contacted you were
5 from which firm?

6 A. There was a firm called *Morgenstein & Jubelirer*.

7 Q. And that later became part of the Shiff Hardin firm,
8 right?

9 A. It did eventually become part of that.

10 Q. The same lawyers you're working for today, right?

11 A. I've worked for lawyers all over. But some of the
12 same ones on occasion I encounter.

13 Q. You still work for the Shiff Hardin lawyers on how
14 many cases; in the last three or four years, how many?

15 A. Probably around 20.

16 Q. Okay. And your work is on Owens-Illinois related
17 cases, right?

18 A. Yes, cases are related primarily to Owens-Illinois.

19 Q. Okay. By the way, you mentioned something about the
20 Merewether publication in 1930; is that the right
21 Merewether I got?

22 A. I believe that's the one that I was talking about.

23 Q. Okay. You said something about Owens-Illinois had
24 that same knowledge when it was making Kaylo as
25 Merewether had in 1930, right; it hadn't changed really?

1 A. I don't think it changed, no.

2 Q. Okay. So I want to just go to a page of the
3 Merewether article. Oh, by the way, did you bring any of
4 your files with you today?

5 A. All I have is the clothes on my back.

6 Q. Okay. So this Merewether report from 1930; now, I'm
7 going to just go forward to this and first I want to
8 begin with this paragraph right here.

9 THE COURT: So the record is clear, why don't
10 you give us a page number, too, please.

11 MR. MCCOY: I will.

12 BY MR. MCCOY:

13 Q. This is page No. 17. Okay. And in this paragraph
14 right here it says, "The insidious onset" -- let me get
15 this a little bigger. So it says, "The insidious onset
16 and unobtrusive signs and symptoms of the disease in its
17 earlier course, its covert advance by imperceptible
18 stages, its points of resemblance latterly to fibroid
19 tuberculosis, with which infection it is sometimes
20 associated, and the migration of those affected from the
21 industry, have all combined to delay its recognition as
22 an entity, and to obscure the causal agent."

23 So did Owens-Illinois get more knowledge than that
24 by the time that it was making Kaylo or during the course
25 of making Kaylo? I mean, the knowledge increased above

1 that, right; it was recognized?

2 MR. CASMERE: I Object to the form of that
3 question. I'm not sure which question he's asking.

4 MR. MCCOY: Okay. I'll rephrase the question.

5 BY MR. MCCOY:

6 Q. By the time Owens-Illinois got into the 1950s, the
7 asbestos was a -- was no longer an obscure causal agent,
8 right?

9 A. We knew, and certainly Owens-Illinois knew, that
10 asbestos could cause asbestosis. What's interesting here
11 is that --

12 Q. Doctor, my question was, by the time Owens-Illinois
13 got into the production and into the 50s production of
14 the Kaylo, Owens-Illinois had more knowledge than this
15 being an obscure causal agent, right?

16 A. I think at that point that probably we were more
17 sure that it caused asbestosis.

18 Q. Okay. So -- and it also talked about in here this
19 section here on *Preventive Measures*. Now, this is fairly
20 long, but Section 6 --

21 THE COURT: Are you going to read in the whole
22 thing or how about if he reads it to himself?

23 MR. MCCOY: I was going to pick out certain
24 points and ask him about it.

25 THE COURT: As long as you don't read the whole

1 thing.

2 MR. MCCOY: No. Okay. That's what I was trying
3 to avoid here.

4 BY MR. MCCOY:

5 Q. Okay. So if you need me to read more, Doctor, let
6 me know. But I want to direct your attention to the --
7 it says, "The necessary preventive measures," and then it
8 says, "control of the disease by periodic medical
9 examination of workers." You would agree that's a
10 preventive measure, at least in the literature of the
11 state of the art?

12 A. Yes.

13 Q. Okay. "Education of the individual," you would
14 agree that's a preventive measure for state of the art
15 purposes?

16 A. Sure.

17 Q. Okay. "To appreciation of the risk and personal
18 responsibility," right?

19 A. That's what it says.

20 Q. Okay. So "The protection afforded by respirators is
21 only partial," you said Owens-Illinois had that
22 knowledge, right?

23 A. I think that we knew that respirators could be not
24 properly used; that, you know, that that was a problem.

25 Q. Right, only partial protection, right?

1 A. In this instance perhaps in 1930 and what I'm
2 reading in this paper.

3 Q. Right. And the same is true when you go forward in
4 time, you said Owens-Illinois had the same knowledge,
5 right?

6 A. I think respirator technology changed.

7 Q. Well, my question is about Owens-Illinois. You said
8 Owens-Illinois had the same knowledge. So they would
9 have still had knowledge, when they were making Kaylo,
10 that the respirator protection was only partial, right?

11 A. I think that they certainly knew that optimally you
12 would want to avoid having to ever use respirators.

13 Q. You would not want to use respirators?

14 A. You would want to create conditions where they're
15 completely unnecessary.

16 Q. Okay. That's the last line of defense, respirators?

17 A. It would be one of the last lines.

18 Q. The first lines of defense would be these other
19 measures like the periodic screening or some sort of
20 control of the dust by engineering, like wetting, or
21 those type things, right?

22 A. Certainly those could be measures.

23 Q. So, in any event, did Owens-Illinois put on -- let's
24 put it this way: Owens-Illinois did not put on the Kaylo
25 boxes or any of the brochures or pamphlets the need for

1 these preventative measures discussed in Merewether when
2 it was making Kaylo; is that right?

3 A. They did not put anything described in Merewether on
4 the boxes.

5 Q. Okay. I'm going to move on to something else. One
6 of the things you mentioned was something about the
7 Badger Ordinance and some materials you had seen, right?

8 A. I did mention Badger Ordinance and materials.

9 Q. All right. And in the course of reviewing those
10 documents from Badger Ordinance, am I correct that you
11 did not find any document which said that -- like an
12 order form or a delivery ticket -- that said a JM product
13 was delivered there?

14 A. All I saw were pictures of the product. I didn't
15 see an actual order.

16 Q. You didn't see anything saying how much was
17 delivered, right?

18 A. A delivery form, no.

19 Q. Okay. And you didn't see anything saying how much
20 JM material was ordered, right?

21 A. I did not see any actual orders.

22 Q. Okay. I want to show you what we have marked as
23 Plaintiff's Exhibit 32 in this case. First, you've seen
24 invoices before from Owens Corning Fiberglas, right?

25 A. Yes, I have.

1 Q. Okay. And that was a company that was, for some
2 period of time, a fairly large distributor for
3 Owens-Illinois Kaylo, right?

4 A. They distributed Owens-Illinois's product.

5 Q. Okay. And the same company that later bought the
6 manufacturing, right?

7 A. They eventually bought the product.

8 Q. Right. And the same company that Owens-Illinois had
9 about a 20% interest in stock-wise, right?

10 A. I think at one time just --

11 MR. CASMERE: I'm just going to object to the
12 relevance of that, Your Honor. That's --

13 THE COURT: I'll let him lay his background
14 foundation. I assume we're heading somewhere here.

15 BY MR. MCCOY:

16 Q. Your answer was what?

17 A. The two were separated. But at one time they may
18 have had an interest in them.

19 Q. Okay. So, in any event, this is an invoice here
20 from Exhibit 32 that says *Shipped To: Sprinkmann Sons*
21 *Corporation*, in care of Badger Ordinance in Baraboo,
22 Wisconsin. That's the same place we're talking about,
23 right?

24 A. That's correct.

25 Q. Okay. And this invoice is dated -- it says *Customer*

1 Order and Date: May 10, 1954, right?

2 A. That's correct.

3 Q. So -- and then it shows it was -- I guess that's cut
4 off. It should say *Invoiced To*, right? Right?

5 A. I would assume so.

6 Q. So *Invoiced To: Sprinkmann Sons Corporation*. And
7 this material in here then in the invoice, this is Kaylo
8 material, right, all these entries here?

9 A. I don't see the word Kaylo on there. But I'm
10 assuming if it came from Berlin, New Jersey, up at the
11 right-hand corner there, that it is most likely Kaylo.

12 Q. Kaylo. And that's because Berlin was where Kaylo
13 was being made by Owens-Illinois at this time, right?

14 A. That's correct.

15 Q. So we've basically got Owens-Illinois selling it to
16 Owens Corning, selling it to Sprinkmann, and shipping it
17 to Badger, right?

18 A. That appears to be what's going on there.

19 Q. Okay. Did you find any documents concerning
20 Sprinkmann in the materials that you reviewed at Baraboo?

21 A. I did not.

22 Q. And you understand Sprinkmann to be an insulation
23 contractor just like the AM&M, right?

24 A. I believe they are, yes.

25 Q. Okay. So this represents linear feet, right, this

1 column?

2 A. That's correct.

3 Q. Okay. In any event, did you see any records about
4 how much Kaylo was actually delivered to Badger Ordinance
5 in the materials that you reviewed?

6 A. No, I did not.

7 Q. I mean, oftentimes these records are very hard and
8 difficult to find back in this era, right?

9 A. For a plant of that size with thousands of buildings
10 and hundreds of miles of pipe, I mean, literally the
11 paper would be incredible, I'm sure, the number of
12 receipts.

13 Q. Very hard to find that, if one still exists even,
14 right?

15 A. I think that a lot of that material was most likely
16 disposed of. And what I'm seeing are contracts and
17 things in that order, kind of a higher level than
18 the on-the-ground number of receipts.

19 Q. Yeah. And in any of those contracts, it didn't say
20 what materials it actually used, right?

21 A. The contracts I saw were describing who the
22 contractors were, but not describing what materials they
23 were putting in. I did, however, see pictures of the
24 materials being applied.

25 Q. Right. But the brand name wasn't listed?

1 A. It's shown in the pictures.

2 Q. I'm saying the brand name wasn't listed in the
3 contracts, right?

4 A. It doesn't go to that level of detail.

5 Q. Okay. You saw in the pictures, as far as -- you saw
6 I think a storeroom that had JM materials in it?

7 A. That's correct.

8 Q. Okay. And you don't know what year that picture was
9 taken, do you?

10 A. 1940s.

11 Q. 1940s?

12 A. That's correct.

13 Q. Okay. And then you saw a picture of a JM box laying
14 out in the, like, an open work field area with the
15 piping, right?

16 A. I think it's adjacent to people actually putting the
17 insulation on.

18 Q. Right. You saw, like, one box in the picture,
19 right?

20 A. I can't remember if it was one or two, but there are
21 boxes in the picture I believe.

22 Q. Yeah. What I'm getting at, too, is this amount of
23 material represented in this invoice for Kaylo would be
24 more than a box, right?

25 A. Yeah, I would assume it's more than a box.

1 Q. Okay. It looks like in total it's about 900, 2,600,
2 3,500, maybe 3,800 linear feet, right?

3 A. Correct.

4 Q. So that's quite a few boxes, right?

5 A. I think in terms of the scale of the overall plant,
6 no. But perhaps in terms of, you know, what maybe -- I
7 think they were doing new construction at that time, so I
8 don't know the overall order. As you pointed out, we
9 don't have all of that information.

10 Q. Okay. This size of an order could even be like a
11 railroad car load, right?

12 A. That size, I don't think so. But I -- you know,
13 again, I can't adduce how large the order was. We've got
14 a few pages there.

15 Q. How many -- what would be the range of feet in a box
16 of this material?

17 A. It would depend on the size of the pipe covering.
18 If it's a smaller size, it would probably be a lot more
19 in terms of footage. I don't know though the range.

20 Q. So this is -- is this two-inch thick material; is
21 that what we're looking at here?

22 A. Three-foot by two-inch.

23 Q. So in a two-inch box, two-inch thick box, how many
24 feet are you going to get?

25 A. I don't know.

1 Q. A box size is approximately what for this
2 insulation?

3 A. I don't know. Six feet high? I'm not sure.

4 Q. You don't know?

5 A. Don't know.

6 Q. Okay. So here's -- this is Billing No. 1292, right?

7 A. Yes.

8 Q. Okay. And here's another one that says *Billing No.*
9 *1137*, right?

10 A. Yep.

11 Q. And this is Invoice B3-4421, first page. Second
12 page is B3-4464, right?

13 A. That's correct.

14 Q. So separate orders, right?

15 A. It appears so.

16 Q. Right. And just about the same size in terms of the
17 quantity of material though, that same 35', 3,800 square
18 foot or linear foot, right?

19 A. I don't remember what the previous page had on it.

20 Q. Okay. Anyways, separate orders. Here's another
21 order. Well, this is part of the same invoice before.
22 This is like B3-4464, same invoice, right?

23 A. Yes.

24 Q. Okay. And then here we've got another invoice.

25 This is Billing No. 1320, B3-4495 this time. Again it

1 looks about like the same numbers or you still don't
2 remember?

3 A. I don't remember from -- I have not memorized each
4 page as you go through them.

5 Q. So again, these are all 5/10/54 orders, right?

6 A. That's correct.

7 Q. Okay. And they're all going to Sprinkmann Sons and
8 Badger, right?

9 A. That's correct.

10 Q. Here's another order also to Sprinkmann. This one
11 is a 19 -- whoops -- a 1954 order, right? Whoops. I'm
12 off the page. 1954 order, right?

13 A. That's correct.

14 Q. They're also going to Sprinkmann and that's a July
15 30 order, right?

16 A. That's correct.

17 Q. And this says Invoice No. B3-4956, right?

18 A. That's what it says.

19 Q. Okay. And again it's got the linear feet on there.
20 So can we agree that Sprinkmann got delivered a lot more
21 than one box of Kaylo, right?

22 A. It looks like --

23 Q. Many boxes, right?

24 A. -- a couple thousand feet of two-inch pipe covering
25 from what you've showed me there.

1 Q. Okay. Now, just as another matter here, we have a
2 final page on Exhibit 32. This one says *L&S Insulation;*
3 *C/O Badger Ordinance; Baraboo, Wisconsin,* is where it was
4 shipped to. L&S, you understand that to be another
5 contractor, right?

6 A. That's correct.

7 Q. And this is also an Owens Corning Fiberglas invoice,
8 right?

9 A. That's correct.

10 Q. So again this would be -- and it's coming from
11 Berlin, right?

12 A. That's correct.

13 Q. So this is also Kaylo, right?

14 A. That's correct.

15 Q. And this one is --

16 MR. CASMERE: I'm sorry. Can we have a year on
17 this, Your Honor?

18 MR. MCCOY: I was just getting there.

19 MR. CASMERE: Thank you.

20 MR. MCCOY: I'll let you take over for me.

21 MR. CASMERE: I would like to.

22 BY MR. MCCOY:

23 Q. Okay. July 8th, 1959, right?

24 A. That's correct.

25 Q. Okay.

1 MR. CASMERE: I would just -- no. Sorry.

2 BY MR. MCCOY:

3 Q. Okay. So, in any event -- and, you know, granted,
4 this one would be after the period when --

5 A. It's not Owens-Illinois Kaylo.

6 Q. Right. It would be after -- it would be when Owens
7 Corning was out there?

8 A. That's correct.

9 Q. Okay. So, in any event, did you see any information
10 about L&S as the contractor in the documents you reviewed
11 for Baraboo?

12 A. No.

13 Q. So you're not able to tell us, one way or the other,
14 about how much work Sprinkmann or L&S actually did at
15 Baraboo; is that right?

16 A. Well, I know that they did -- that there was a
17 building built, as I mentioned earlier, between '53, '54,
18 the ball mill. So that was new construction during the
19 early 1950s and I'm assuming that that's what that
20 two-inch material went into.

21 Q. You're assuming that, but you don't actually know
22 one way or the other, right?

23 A. There's no -- just a list of the names of the
24 contractors for the 1950s, unlike the one that existed
25 from the 1940s.

1 Q. The Baraboo construction and redesign work went on
2 for a couple decades, right?

3 A. No. The place went into mothballs, then it would
4 come out of mothballs and it would go back into
5 mothballs. So there was new construction in the early
6 1950s. That's ball mill.

7 Q. I'm sorry?

8 A. There was a mill built in the early 1950s and I'm
9 assuming that's what that material went into.

10 Q. Right. But over this period of time there was
11 ongoing construction, even if you're saying it started
12 and stopped, right?

13 A. I believe that they expanded the plant
14 significantly. They certainly resurrected parts of it.
15 You know, for the Vietnam War they had to, you know, get
16 things running again. But I don't know the details on
17 what happened in the 60s. I don't remember them as I sit
18 here today.

19 Q. Right. You never interviewed anybody who actually
20 worked out of Baraboo, right?

21 A. The archivist that I talked to had worked at
22 Baraboo, but I did not do a formal interview with him.

23 Q. Right. Okay. And I think you said that that was
24 good practice as an historian was interview people alive
25 who actually worked there, right?

1 A. It can be. I think oral history, as I explained
2 earlier, has its downfalls. But, you know, certainly
3 talking to somebody -- it was very valuable for me to
4 talk to him because he told me where the papers were.

5 Q. Right. He told you where the papers were, but you
6 never interviewed anybody who did actual work out in the
7 facility, right?

8 A. I did not interview anybody that worked on there in
9 the 1940s.

10 Q. Or in 1950s, right?

11 A. Did not talk to anyone who worked there in the 19 --
12 worked on it in the 1950s.

13 Q. Or the 1960s, right?

14 A. No.

15 Q. All right. The next thing I wanted to ask about is
16 you had mentioned something about a practice out of
17 Baraboo concerning respirators. Do you happen to know
18 what document you're referring to?

19 A. I believe there's a 1951 -- a manual. I don't have
20 it in front of me.

21 Q. Uh-huh.

22 A. Perhaps you'll show it to me. But it does mention
23 respirators.

24 Q. Do you know who actually got copies of the manual?
25 I mean, was it distributed -- what I'm asking is, was

1 this distributed to the individual workers or who?

2 A. I do not know if it was distributed to individual
3 workers.

4 Q. Did the manuals say that the respirators provided
5 only partial protection like Merewether?

6 A. No.

7 Q. So somebody reading -- would somebody reading the
8 manual read something that says, "The respirator will
9 protect you against asbestos"? They wouldn't read that,
10 right?

11 A. Those words do not appear in that manual.

12 Q. The respirators, just back in that time, often were
13 just for general dust, right?

14 A. They were, in that time, respirators for all
15 different kinds of dust.

16 Q. Was there any specificity in the manual?

17 A. In that manual, no.

18 Q. So it could have been anything going all the way
19 down to one of those paper masks that didn't work very
20 well, right?

21 A. At a munitions facility, if they're calling for
22 respirators because of the danger of the materials that
23 are being used, I would assume it was a sophisticated
24 respirator, having looked at, you know, other ordinance
25 facilities.

1 Q. But that's an assumption, right?

2 A. Certainly as an historian, I'm assuming that the
3 injury and the gravity means that using the paper
4 respirator would not have been sufficient in that
5 situation.

6 Q. Okay. But the manual didn't say anything about the
7 type of respirator, right?

8 A. It doesn't define exactly what type of respirator it
9 is.

10 Q. Did the manual say there was a hazard from asbestos?

11 A. It does not say *hazard from asbestos* in the manual.
12 It says *dusty conditions*.

13 Q. Okay. And did the manual say anything about
14 supervisors having meetings with employees and telling
15 them -- educating them about asbestos like the Merewether
16 report?

17 A. I don't believe that it has a section on people
18 meeting and discussing asbestos.

19 Q. And did the manual say anything about needing to do
20 medical screenings of employees over time like Merewether
21 said?

22 A. There may be a section on x-rays in the manual, but
23 I don't recall as I sit here right now.

24 Q. Okay. Assuming that this A&M or AM&M Company out of
25 Chicago -- you mentioned that name, right?

1 A. A&M Manufacturing.

2 Q. Yeah. -- assuming they did any work at Badger -- I
3 think you said they had a contract; you saw something
4 about a contract?

5 A. We know they did work at Badger.

6 Q. Okay. They had a contract, right?

7 A. That's correct.

8 Q. Okay. You don't know whether they used employees
9 from another contractor, like a subcontractor, to fulfill
10 their contract; you don't know that, do you?

11 A. That I cannot discern from the contract.

12 Q. Okay. And it's also possible that employees in
13 these insulation contractors are loaned from one
14 principal employer to another when there's not enough
15 work at their principal employer, right?

16 A. It's possible that could happen.

17 Q. You don't actually know anything about Oswald
18 Suoja's own work at Badger; is that right?

19 A. To my knowledge, Mr. Suoja never was deposed and so
20 I have no idea if he ever worked there at all.

21 Q. Okay. Now, even assuming that AM&M was advertising
22 JM products in the phone book -- you said, right?

23 A. That's correct.

24 Q. Okay. -- that doesn't mean that they necessarily,
25 if they delivered product to Badger Ordinance, delivered

1 that JM product; it doesn't mean that, right?

2 A. I suppose that they may not have. But it's the
3 boxes are there in the pictures, so the warehouse is full
4 of it.

5 Q. Right. That's in the 1940s you saw those two
6 pictures, right?

7 A. That's when they had the contract.

8 Q. Okay. And it could be though that they delivered
9 other products besides JM and they're just not in photos,
10 right?

11 A. It's possible there's another warehouse full of
12 another material I suppose, but I haven't seen a picture
13 of that.

14 Q. And it's also possible they hired subcontractors who
15 provided a different kind of material than JM, right?

16 A. It may have been, except that the footage that is
17 being described in the contract is so massive that one
18 can imagine that it must have stayed consistent.

19 Q. That's just imagining though, right?

20 A. Excuse me?

21 Q. That's just imagining, right?

22 A. The numbers aren't imagination; they are there.

23 Q. Right. But the need for consistency could just as
24 easily be because it's so big, you had to have a couple
25 of different types of products out there, right?

1 A. There may have been another product out there.

2 Q. Right, a couple different subcontractors because
3 it's so big, right?

4 A. I just haven't seen no evidence of that.

5 Q. Okay. But you don't know one way or the other,
6 right?

7 A. I don't want to guess.

8 Q. Okay. You haven't made any publications in the
9 literature on asbestos; is that right, Doctor?

10 A. I have not.

11 Q. You're familiar with the threshold limit values?

12 A. That's correct.

13 Q. That's the ACGIH standard, right?

14 A. That's correct.

15 Q. And you said that those were adopted in Wisconsin;
16 is that right?

17 A. That's right.

18 (Reporter clarification).

19 MR. MCCOY: Were adopted. I apologize. Let me
20 get some water.

21 BY MR. MCCOY:

22 Q. You've acknowledged that a stated purpose of the
23 TLVs, that's the *threshold limit values*, set in 1948 was
24 to seek values which would impose no impossible burden on
25 the manufacturer, right?

1 A. I don't remember saying that. The list appears in
2 '46 for the first time.

3 MR. MCCOY: This is from the *Humphreys* case,
4 October 16, 2014.

5 MR. CASMERE: Go ahead.

6 MR. MCCOY: Okay.

7 BY MR. MCCOY:

8 Q. You testified in this case up in Minnesota on
9 October 16th of 2014, right?

10 A. That's correct.

11 Q. And that was the *Humphreys* case?

12 A. That's correct.

13 Q. Now it's a trial, right?

14 A. It was a trial.

15 Q. St. Paul, right?

16 A. That's correct.

17 Q. So I'm going to show you a couple pages of your
18 testimony.

19 THE COURT: Are you refreshing his recollection
20 or impeaching him?

21 MR. MCCOY: I think I'm refreshing his
22 recollection.

23 THE COURT: Then why don't you let him read it
24 and see if that refreshes his recollection.

25 MR. MCCOY: Okay. I'll do that, Judge.

1 BY MR. MCCOY:

2 Q. I'll show you the transcript starting line 6, on
3 page 8, going over to page 9, line 11.

4 A. I'm reading from the *1948 10th Annual Meeting of the*
5 *American Conference of Governmental Industrial*
6 *Hygienists.*

7 Q. Okay. So would you agree that that refreshes your
8 recollection that a stated purpose for the TLVs was to
9 seek values which would impose no impossible burden on
10 the manufacturers?

11 A. It refreshes my recollection of reading something
12 out of this manuscript that said, "Values, on the one
13 hand, protect the individual workers and, on the other,
14 would impose no impossible burden on the manufacturer."

15 Q. Okay. So there's a -- in the TLVs the thought
16 process of adopting those was to not impose impossible
17 burdens on manufacturers; that was part of it, right?

18 A. In that line out of that transaction that appears to
19 be a sentence. The TLVs are guidelines for
20 manufacturers. They have always been guidelines.

21 Q. Okay. So but when you say "no impossible burden,"
22 that could mean if it's too difficult to, at that time
23 period, to keep the exposures below a certain level, then
24 the level would be set so it wasn't impossible for the
25 manufacturers to meet that under the normal conditions,

1 right?

2 A. I think clearly that zero would probably be
3 impossible. And again I'm guessing. I don't want to
4 guess what's in the rest of that document. I read a
5 couple of lines out of it. But clearly they want to find
6 some way in which the manufacturer can continue to
7 produce, but has to do so below a TLV.

8 Q. Okay. Now, let's move on here. The first report in
9 the United States on cancer and asbestos comes about in
10 1935, right, in the literature?

11 A. There's a case study I believe in the 30s.

12 Q. That's the Lynch publication?

13 A. That's correct.

14 Q. And that's part of the information that was
15 disseminated that Owens-Illinois would have had, right?

16 A. It's part of the general state of the knowledge of
17 asbestos of that time. Whether they had a copy of that
18 in 1930, I don't know.

19 Q. Okay. Well, let's talk about Owens-Illinois for a
20 minute. It's your -- it's your position that
21 Owens-Illinois kept itself abreast of the literature for
22 the time when it was manufacturing Kaylo, right?

23 A. They had a very sophisticated industrial hygienist
24 who I believe kept them abreast of the literature.

25 Q. Right. And they also had an excellent medical

1 director in Dr. Shook, right?

2 A. Dr. Shook was excellent.

3 Q. Okay. And they had a library of medical industrial
4 hygiene publications at Owens-Illinois, right?

5 A. I believe they did, yes.

6 Q. A publication like *Lynch* would be one likely to find
7 its way into the library, right?

8 A. I don't think that would, but it's possible that
9 Shook might have had something like that.

10 Q. All right. So during the time that Owens-Illinois
11 made the Kaylo; Owens-Illinois, we can agree, did not
12 warn -- put warnings on the Kaylo boxes or the
13 literature, right?

14 A. I'm sorry?

15 Q. On the product literature, I mean. During the time
16 that Owens-Illinois was making Kaylo, Owens-Illinois did
17 not put warnings about asbestos on the Kaylo boxes or on
18 the promotional literature, right?

19 A. There were no warnings.

20 Q. And Owens-Illinois did not, during that time period,
21 provide precautionary instructions about how to use
22 protective measures for Kaylo, right?

23 A. They did not provide instructions for protective
24 measures.

25 Q. Owens-Illinois did not provide any information, that

1 you're aware of, to Badger Ordinance about the necessary
2 protective measures when Kaylo was used?

3 A. I've seen no correspondence whatsoever between
4 Owens-Illinois and Badger Ordinance.

5 Q. Let me -- Owens-Illinois -- I'm just going to do
6 these in order. It will go a little faster.

7 Owens-Illinois was a member of the Industrial Hygiene
8 Foundation from 1936 to 1976; is that right?

9 A. That's correct.

10 Q. Okay. And that's an organization that disseminated
11 information about health concerns to the members, right?

12 A. That's correct.

13 Q. And you're aware that in March -- by a letter dated
14 March 12, 1943, from Leroy Gardner, the director at
15 Saranac, to Mr. U.E. Bowes, director of research at
16 Owens-Illinois, that there was information transmitted to
17 Owens-Illinois from Saranac, right?

18 A. Yes.

19 Q. Okay. And I'll put that letter here for a moment.
20 This is Plaintiff's Exhibit 38, same one that we had
21 published a little bit earlier before you testified. So
22 this is that letter from Dr. Gardner, who is an MD,
23 right?

24 A. That's correct.

25 Q. Okay. And he was heading up at that time the

1 Saranac research for O-I?

2 A. Yes, he was.

3 Q. Mr. U.E. Bowes, Director of Research, that was under
4 his watch that Kaylo was being developed, right?

5 A. He employs -- is the person in charge of employing
6 Saranac.

7 Q. So here it says in this third paragraph, "The fact
8 that you are starting with a mixture of quartz and
9 asbestos would certainly suggest that you have all the
10 ingredients for a first-class hazard." And then
11 ultimately they were proposing the start of these Saranac
12 studies for Owens-Illinois in that letter, right?

13 A. That's correct.

14 Q. Okay. Now, the information about -- well, first
15 off, Owens-Illinois was doing pilot manufacturing of
16 Kaylo starting in 1943, right?

17 A. That's correct.

18 Q. And some of that pilot manufacturing was sold
19 outside of O-I, right?

20 A. Very little, but there was some sold I believe; not
21 necessarily in '43, but in '44.

22 Q. Okay. So let me ask you this question: was this
23 letter or this information in this letter about a
24 first-class hazard, did you find any evidence that
25 Owens-Illinois had published that in any of the documents

1 that went out with the product?

2 A. I have not seen that.

3 Q. In 1948 there was the interim report issued about
4 the Saranac studies, right?

5 A. Yes. There were a number of interim reports. There
6 was one in 1948.

7 Q. I'm showing you this document. This is the 1948 --
8 October 30, 1948 interim report from Saranac to O-I,
9 right?

10 A. That's correct.

11 Q. Now, in this time period it says "Arthur J. Vorwald
12 M.D., Director, the Edward L. Trudeau Foundation." Is
13 that the same as Saranac basically?

14 A. Yes. Dr. Gardner had tuberculosis and died in
15 between this report and the earlier correspondence in the
16 early 40s.

17 Q. It's a continuation of the same work though
18 basically, right, the same research?

19 A. The same research.

20 Q. So this is regarding biological activity of Kaylo
21 dust and it's to Owens-Illinois by Saranac. And I want
22 to direct your attention to just a couple pages here.

23 This is page -- and this is Exhibit 41, for the record,
24 by the way, we were talking about. So on this page here
25 I guess, I think this is page 5. It's hard to read.

1 It's page 5 of the document. So it says in here, I'm
2 reading, "Thus, it appears that very small numbers of
3 fibers are capable of producing asbestosis, although the
4 development of the lesions is delayed. The present
5 experiment with Kaylo is also an example of this fact."

6 So when it talks about the producing asbestos --
7 asbestosis, small number of fibers, was that something
8 that Owens-Illinois published with its brochures and the
9 literature, promotional materials?

10 A. They didn't. But the fibers there are not Kaylo, if
11 you read the rest of the page on the previous one.

12 Q. All right. So these fibers are what kind?

13 A. They're pure asbestos, for all I know. It's not
14 really well defined on the previous page, but it's not
15 Kaylo.

16 Q. Okay. It's not the finished Kaylo product, but it's
17 the same type of asbestos fibers that go into Kaylo,
18 right?

19 A. I have no idea what kind of asbestos fibers there
20 are. It says "ball mill asbestos" on the previous page.
21 What kind of asbestos, I do not know.

22 Q. It could be chrysotile, it could be amosite?

23 A. They make -- it could be, but they make it clear
24 it's not part of the Kaylo experiment.

25 Q. Okay. In any event, that's what they said. And it

1 says, "The present experiment with Kaylo is also an
2 example of this fact," correct?

3 A. That's what that says.

4 Q. All right. So now let's go on here to the
5 conclusions. We're on page 6 now. And it says, "Kaylo,
6 because of its content of an appreciable amount of
7 fibrous chrysotile, is capable of producing asbestosis
8 and should be handled as a hazardous industrial dust,"
9 correct?

10 A. That's what it says.

11 Q. So did Owens-Illinois again publish with promotional
12 literature or advise anybody at Badger that it was a
13 hazardous industrial dust to Kaylo?

14 A. They had no correspondence with Badger.

15 Q. Did Owens-Illinois tell the -- well, first off, the
16 product Kaylo, Owens-Illinois certainly knew, was going
17 to be used by members of the Asbestos Workers Union,
18 right?

19 A. I would certainly assume they expected that to
20 happen.

21 Q. So did Owens-Illinois provide any information to the
22 Asbestos Workers Union about the hazardous industrial
23 dust status of Kaylo?

24 A. I've seen no correspondence between Owens-Illinois
25 and the Asbestos Workers Union.

1 Q. Did Owens-Illinois provide a statement to the
2 Asbestos Workers Union saying that it would take only
3 small numbers of fibers to produce asbestosis?

4 A. There's no such statement made to the Asbestos
5 Workers Union.

6 Q. Did Owens-Illinois provide any information to the
7 Asbestos Workers Union or Baraboo personnel saying that
8 the Lynch publication in 1935 had found cancer in the
9 person that was studied in that?

10 A. They would have had no connection to them in 1935,
11 so they would not have corresponded with them, but they
12 did not.

13 Q. Okay. Well, when they later had a connection with
14 them when Owens-Illinois was making Kaylo, Owens-Illinois
15 didn't provide any information about that Lynch
16 cancer publication?

17 A. They did not, as far as I can tell, they did not
18 reproduce a '35 page and send it there.

19 Q. Then another report came out in 1952. This was the
20 final report from Saranac about Kaylo, right?

21 A. I believe it is.

22 Q. Okay. That's this one right here, which is Exhibit
23 37. It's the *Investigation Concerning the Capacity of*
24 *Inhaled Kaylo Dust to Injure the Lung*, right?

25 A. That's what it is called.

1 Q. And that's known as the *final report* from Saranac,
2 right?

3 A. Well, the final reports can be the published paper.
4 But, yeah, that's the final of a series of reports.

5 Q. Well, the final report that came to Owens-Illinois's
6 personnel is this one, right?

7 A. This came to Owens-Illinois personnel, yes.

8 Q. Okay. This is what Owens-Illinois was paying
9 Saranac for, right?

10 A. That's correct.

11 Q. Okay. And the final report reflects the findings
12 that I think you've already described, like "The 9
13 animals exposed to Kaylo for more than 30 months showed
14 not only lesions like those of the 30-month animals, but
15 also exhibited a true fibrosis of the type characteristic
16 of the response to the guinea pigs to the inhaled
17 asbestos fibers," right?

18 A. They're finding asbestosis.

19 Q. All right. It's also finding lesions, right?

20 A. That's what it says there.

21 Q. Okay. Lesions could be the development ultimately
22 of a cancer, right?

23 A. That's not what it says there.

24 Q. Okay. And again "The results" -- this is page 15
25 I'm at now -- "The results of the inhalation experiment

1 prove that Kaylo dust, when inhaled into the lungs of
2 guinea pigs for a prolonged period (30 to 33 months), is
3 capable of producing the peribronchiolar fibrosis
4 characteristic of the disease asbestosis," right?

5 A. That's what it says there.

6 Q. So if it says here at the end on the *Summary*, 17,
7 page -- "Kaylo dust, when inhaled for a prolonged
8 period" --

9 A. Sorry. Can't read it.

10 Q. Whoops. Lost the focus. My finger did that.
11 "Kaylo dust, when inhaled for a prolonged period, is
12 capable of producing, in the lungs of guinea pigs" -- "in
13 the lungs of guinea pigs, but not of rats, the
14 peribronchiolar fibrosis typical of asbestosis," right?

15 A. That's correct.

16 Q. All right. That's what Owens-Illinois got. And you
17 said something about -- and this went to, like,
18 Mr. Hazard, the industrial hygienist from Harvard, right?

19 A. He would have received a copy of that report and
20 others.

21 Q. I'm sorry to interrupt.

22 A. And probably others did as well.

23 Q. Dr. Shook, the medical director, would have known
24 about it, right?

25 A. He may have.

1 Q. Okay. Now, these documents -- again, this
2 information wasn't published by Owens-Illinois through
3 any of the materials associated with Kaylo or to any of
4 the customers, right?

5 A. The information in those reports was published by
6 Saranac. It does not mention the name *Kaylo*.

7 Q. Okay. My question was, did Owens-Illinois itself
8 publish that information in these reports?

9 A. No. It went into a peer-review journal.

10 Q. All right. When you say it went into a journal
11 though, you said Owens-Illinois didn't have anything to
12 do with that, right?

13 A. They encouraged them to publish it, but they had
14 nothing to do with the content. They didn't even know it
15 was being prepared for publication. And they were, I
16 think the words were, *pleasantly surprised* when they
17 received the published result.

18 Q. And you didn't -- you don't know who actually -- or
19 you haven't seen any information, as far as any recorded
20 conversations, about what was discussed between
21 Owens-Illinois and the authors when they actually
22 published it in the peer-review journal, you haven't
23 seen -- you didn't interview any of those people, right?

24 A. Those people had passed away before I knew what this
25 was.

1 Q. Right. So you don't know what they actually might
2 have communicated orally between each other, right?

3 A. We have their correspondence.

4 Q. Yeah. But I'm just saying, that's not the oral
5 communications that I asked you about, the interviews;
6 they didn't have that, right?

7 A. No. I don't believe there's any tape-recordings of
8 conversations between the director, Arthur Vorwald, or
9 Dr. Schepers and Mr. Hazard.

10 Q. Okay. So the publication occurred in the *Archives*
11 *of Industrial Health* in September of 1955, three years
12 after this final report, right?

13 A. Yes.

14 Q. Seven years after the preliminary report, right?

15 A. Which preliminary report?

16 Q. The 1948 report.

17 A. Okay. There's several of those, but after the '48
18 one, yes.

19 Q. Okay. So Owens-Illinois itself took no action to
20 publish, but ultimately it got published in 1955, toward
21 the end of the time when Owens-Illinois stopped selling
22 Kaylo, right?

23 A. Owens-Illinois did not publish it themselves and
24 that probably makes it more valuable from an academic
25 standpoint. It was published by Saranac Laboratory.

1 Q. Yeah. But that's not my question, Doctor, please,
2 okay? I want to get you out of here. My question was,
3 Owens-Illinois didn't take any action itself, like back
4 in '48, to publish; they waited until somebody did it in
5 '55, which is near the time when they stopped selling
6 Kaylo, right?

7 A. They did not take action to publish the results
8 themselves. They encouraged Saranac Lake to do so.

9 Q. So the publication by Saranac doesn't say anything
10 about the product's name is *Kaylo*, does it?

11 A. It does not.

12 Q. Okay. And it doesn't say that the product should be
13 treated as a hazardous industrial dust, does it?

14 A. I believe -- I don't recall those words being in
15 there, no.

16 Q. And it doesn't say anything about when using that
17 product, you need to use the measures -- the preventive
18 measures that Merewether had talked about in 1930; it
19 doesn't say that in this published version?

20 A. I don't believe Merewether is cited in that paper.

21 Q. Okay. And preventive measures aren't cited either,
22 right?

23 A. I don't believe those were cited in there.

24 Q. So it basically doesn't provide any information
25 about what kinds of exposures would occur to people

1 actually using Kaylo, does it?

2 A. It's not a study of that.

3 Q. Owens-Illinois did have studies done about the
4 exposures to people that were cutting and sawing and
5 handling finished Kaylo products, right?

6 A. They had Saranac come and take dust measurements in
7 the workplace of people performing those activities, in
8 the vicinity of people performing those activities.

9 Q. Okay. And that study -- there was also a study done
10 by Aetna, right?

11 A. Yes. I'm aware of that study.

12 Q. And that's -- I want to have Exhibit No. 39. I'll
13 show you, this is the *Special Hazards Study* that was done
14 by Aetna, Exhibit 39, right?

15 A. That's correct. That's when the plant has changed
16 hands and gone over to Owens Corning.

17 Q. And this is prepared for Owens-Illinois, Kaylo
18 Division. And it's by Aetna, the Engineering Department
19 of Aetna Life Affiliated Companies, right?

20 A. That's correct.

21 Q. And this was a little difficult here to read, but
22 it's April 28 and May 2, 1958, right?

23 A. I believe that's correct, yes.

24 Q. I apologize. My copy is not so good. So this was
25 done a couple days or about -- see, the business was sold

1 April 30th, right?

2 A. I believe so.

3 Q. So part of these studies were done a couple days
4 before and the rest were done a couple days after, right?

5 A. That may be.

6 Q. This was actually done in the plant in Berlin,
7 right?

8 A. I believe it's in Berlin, yes.

9 Q. Yes. It's hard to read again, but that's Berlin.
10 So it says, "The purpose of this visit was to determine
11 the employee exposure to dust in production operations."
12 So these production operations that we looked at, at
13 least some of them in here, were the ones where the Kaylo
14 had been finished and now they had to cut it into those
15 three-foot lengths or bag it, or whatever, or put it into
16 boxes, right?

17 A. It wasn't produced in bags; it was cut into lengths.
18 And I think further in the report they break down what
19 portions may have pertained to that or not.

20 Q. Anyways, they took some samples then, just talking
21 about these two samples right here --

22 THE COURT: Mr. McCoy, let me interrupt with an
23 informational question. Why is it relevant to your
24 lawsuit against Owens-Illinois that this report was
25 submitted to Owens Corning?

1 MR. MCCOY: Well, it was for Owens-Illinois.

2 THE COURT: Look at the receipt. Look at the
3 receipt stamp.

4 MR. MCCOY: I see the receipt.

5 THE COURT: Who received it?

6 MR. MCCOY: Well, it says --

7 THE COURT: Who received it?

8 MR. MCCOY: Owens-Illinois. I can ask --

9 THE COURT: Who --

10 MR. MCCOY: Owens-Illinois got it, Judge.

11 THE COURT: No. It says Owens Corning got it.

12 MR. MCCOY: That's where the copy came from.

13 THE COURT: When did they stop selling the
14 product?

15 MR. MCCOY: It says 19 --

16 THE COURT: When did Owens-Illinois stop selling
17 the product?

18 MR. MCCOY: Well, it says 1958. But I'm saying
19 Owens-Illinois got a copy of this document. The witness
20 has testified before --

21 MR. CASMERE: Hold on. I have an objection.
22 There's no foundation that we ever got this document.
23 And when he goes to move it into evidence, I have an
24 objection.

25 THE COURT: It's out. It's out. You're wasting

1 our time.

2 MR. MCCOY: Let me lay the foundation.

3 THE COURT: You can ask three questions and lay
4 the foundation. If you don't, your cross-examination is
5 over. You can either move on or lay the foundation and
6 take your chances.

7 BY MR. MCCOY:

8 Q. Okay. Dr. Neushul, this Aetna study was something
9 that Owens-Illinois did get a copy of, right?

10 A. I don't know.

11 Q. I want to direct your attention to testimony that
12 you gave in the case of *Green v. Owens-Illinois*. And
13 this was given on Friday, November 2, 2007. I don't know
14 if you remember this one or not.

15 A. I don't.

16 Q. Okay. This shows I took your deposition on that
17 day, right?

18 A. I guess so.

19 MR. MCCOY: Okay. Judge, I'm going to offer
20 this one for -- I think I can refresh the witness's
21 recollection again on this.

22 THE COURT: Which is fine. I'll let you do
23 that. But does Dr. Neushul say in that testimony that
24 Owens-Illinois got this report?

25 MR. MCCOY: Okay. I'll just use it for -- he

1 said "I don't know" here.

2 THE COURT: No, no. Mr. McCoy, let's make sure
3 we understand each other.

4 MR. MCCOY: Okay.

5 THE COURT: I gave you two choices: you can
6 either move on past the 1958 report or you can attempt to
7 lay the foundation. But if you don't lay the foundation,
8 your cross-examination is over. And it's not clear to me
9 which path you're taking. Are we moving on?

10 MR. MCCOY: I'll just use it to refresh his
11 recollection.

12 THE COURT: Okay. But what I just asked,
13 Mr. McCoy -- please, just answer my question -- does that
14 testimony by Dr. Neushul indicate that Owens-Illinois
15 received this 1958 report?

16 MR. MCCOY: Yes.

17 THE COURT: Okay. Let's proceed.

18 BY MR. MCCOY:

19 Q. Okay. All right. So I'm going to direct you to
20 these lines here. This is page 49, line --

21 A. That's talking about --

22 Q. 12 through --

23 A. Sure. So Exhibit 7, this again is part of the body
24 of Saranac Lake documents and it's generated by the
25 Saranac Lake Laboratory in its report on the Kaylo

1 Division plant at Sayreville, New Jersey. And I believe
2 this is part of the survey that Owens-Illinois employed
3 the lab to do at their facility. Is that what you're
4 talking about?

5 Q. Let's see. I'm talking about this one right here.
6 Exhibit No. 8, line 18 describes it.

7 A. It says, "Yes. Is this also a document that was
8 received by Owens-Illinois?"

9 "Yes. This was received and prepared for
10 Owens-Illinois Kaylo Division in Berlin, New Jersey."

11 Q. Okay. Thank you.

12 A. I don't know what that is.

13 Q. Thank you. That was your testimony back in 2007,
14 right?

15 MR. CASMERE: I'm sorry. Could we have an
16 identification of what's the exhibit number?

17 A. What's the exhibit number?

18 Q. Exhibit 8. I'll let you finish reading. It says
19 it's a *Special Hazards Survey*, right?

20 A. Yeah. But I don't -- that could have been one of
21 the surveys done by --

22 Q. A *Dust Survey* from the Aetna Company, right?

23 A. Where does it say that? I just want to make sure
24 what you're saying is there.

25 Q. Right there. Go to the next page.

1 A. This was also received -- prepared by the
2 Owens-Illinois Kaylo Division in Berlin, New Jersey. The
3 previous one was at Sayreville. And this is a *Special*
4 *Hazards Survey*, a *Dust Survey*, from the Aetna Company.

5 MR. CASMERE: Your Honor, I'm going to object to
6 this coming in. But if he wants to ask questions about
7 it so we can end this, I --

8 THE COURT: That's fine. But Mr. -- again, this
9 is a *Wild West* bench trial, but we're veering off the
10 path. Let's do it this way:

11 Mr. McCoy, Dr. Neushul testified for about 90
12 minutes on direct, give or take a minute, a little bit
13 less.

14 MR. MCCOY: Okay.

15 THE COURT: You've had him for 75 minutes. I'll
16 give you 15 more, but at three o'clock you're done. So
17 use your time wisely. Understood?

18 MR. MCCOY: Yes.

19 THE COURT: And if you've done early, I'll give
20 you bonus points. But at three I pull the plug.

21 MR. MCCOY: I'm going to work early. I need my
22 bonus. It's Christmastime, Judge.

23 THE COURT: I was just saying, you got 'til
24 three. Make it count.

25 MR. MCCOY: Okay, Judge.

1 BY MR. MCCOY:

2 Q. So anyways, I just want to direct your attention to
3 these two findings:

4 *Air Sample No. 3:* "Horizontal Splitting Saw - taken
5 at the breathing level of the operator operating the
6 pieces as they came through the saw - taken between the
7 saw and the operator."

8 And that was recorded at "91.8 million particles per
9 cubic foot of air," right?

10 A. That's what it says there, yes.

11 Q. The next one is *Air Sample No. 4*. I can't quite
12 read there, but it says "Finishing" -- "taken at the
13 level of operator feeding flat" -- I can't read that
14 word -- "to the trim saw."

15 And that sample came in at "46.3 million particles
16 per cubic foot of air," right?

17 A. That's correct.

18 Q. Okay. So --

19 MR. CASMERE: I'm going to object unless he
20 establishes that those are total dust or asbestos dust
21 samples.

22 MR. MCCOY: Okay.

23 THE COURT: I'm not sure where this is going.
24 So from the Court's perspective, we can always strike it
25 later. Right now we're going by the clock.

1 MR. MCCOY: All right.

2 BY MR. MCCOY:

3 Q. Okay. So again, the purpose was "to determine
4 employee exposure to dust in production operations,"
5 right?

6 A. Yes.

7 Q. All right. So were these samples reported to the
8 committee for the ACGIH?

9 A. Those total dust samples were not reported to the
10 ACGIH.

11 Q. Were these in the publication, the samples at this
12 level, in the publication that was made in 1955 by the
13 Saranac Labs?

14 A. The study of animals, no.

15 Q. So essentially these -- and these levels of exposure
16 were not published in any of the Kaylo promotional
17 materials that went out to Baraboo or to anybody, right?

18 A. No.

19 Q. Okay. Did Owens-Illinois understand that asbestosis
20 had a latency period when it began making Kaylo?

21 A. I believe that certainly Hazard and Shook must have
22 understood, as did many entities, that there was a
23 potential latency before asbestosis could emerge if one
24 were working of course in conditions that exceeded the
25 TLV.

1 Q. What did Owens-Illinois understand to be the latency
2 period beyond which you should be studying to see how
3 many people were getting sick?

4 A. They didn't find any illness at all because they
5 were staying -- presumably because they were staying
6 within the TLV. They -- I would assume Shook and Hazard
7 would have understood that depending on the levels of
8 exposure; the levels of exposure, for example, that --

9 Q. That's not my question, Doctor. I'm trying to stay
10 in my time period. So Owens-Illinois didn't have any
11 understanding of the latency period; is that what you're
12 saying?

13 MR. CASMERE: Objection. Asked and answered,
14 Your Honor.

15 THE COURT: Well, that's also not what he said.

16 MR. MCCOY: Okay.

17 THE COURT: Why don't you pose a new question.

18 MR. MCCOY: All right. Let me go on.

19 BY MR. MCCOY:

20 Q. Owens-Illinois was only in full production of Kaylo
21 for eight years, right?

22 A. Most likely, yes.

23 Q. So the studies of their own in-plant workers would
24 have been people less than eight years, right?

25 A. The x-rays that they were taking during that period

1 of time most likely ended when they sold the facility.

2 Q. Okay. As far as publications are concerned and the
3 literature, mesothelioma was reported at least in the
4 Smith-Cartier article in about 1952, right?

5 A. There are articles that we've gone back on and
6 looked at and said, yes, that may well have been
7 mesothelioma. But the seminal piece is in 1960 published
8 by Wagner, as I presented earlier.

9 Q. The Smith-Cartier, '52 sounds about right?

10 A. I don't have it in front of me, but it could
11 certainly be '52.

12 Q. This is *AMA Archives of Industrial Hygiene and*
13 *Occupational Medicine, March 1952.* And in this
14 publication, which is the *Proceedings of the Cancer*
15 *Prevention Committee*, I direct your attention to page
16 262. This *Abstract of Discussion* has a chart here,
17 "Cases of carcinoma of the lungs detected among 4,000
18 asbestos workers 1940 to '50." And so over here, *Type of*
19 *Tumor*, there's one report of pleural mesothelioma there,
20 right?

21 A. That's correct.

22 Q. Okay. And another report of pleural mesothelioma
23 there, right?

24 A. That's correct.

25 Q. Okay. All right. So in terms of Owens-Illinois

1 keeping abreast of this literature, did Owens-Illinois
2 make any changes in terms of health information when
3 these reports of mesothelioma came out in '52 in terms of
4 what was being advised through the product information?

5 A. No.

6 Q. And in terms of the amount of asbestos needed to
7 cause the mesothelioma cancer, that's a lot less than
8 what's needed for asbestosis, right?

9 A. I believe there can be cases of --

10 MR. CASMERE: I'm going to object. This is
11 beyond the scope of this witness's testimony. He's not a
12 medical doctor.

13 MR. MCCOY: Judge, he's testified about many
14 medical articles and his understanding of that.

15 THE COURT: You can ask him about an article
16 he's read, but you can't ask him for his medical opinion.

17 MR. MCCOY: Okay.

18 BY MR. MCCOY:

19 Q. Have you read medical articles that say that it
20 takes a lot less asbestos to cause mesothelioma?

21 MR. CASMERE: I'm going to object to the scope
22 if those articles exist after April 30th of 1958.

23 MR. MCCOY: Judge, I'll withdraw the question.
24 I can move on. We've got enough testimony.

25 THE COURT: You've got seven more minutes.

1 MR. MCCOY: Okay.

2 BY MR. MCCOY:

3 Q. You talked about the -- you mentioned the Industrial
4 Hygiene Foundation, right?

5 A. I believe you did.

6 Q. Okay. And that's an organization that
7 Owens-Illinois, you said, was a member of, right?

8 A. They were the founding members.

9 Q. And there was information distributed to the
10 membership through the *Industrial Hygiene Digest*, right,
11 that was sent to the members?

12 A. Abstracts were sent to members, yes.

13 Q. Okay. I'm going to just show a couple of these.
14 This one is January 1945, *Industrial Hygiene Digest*.
15 This is what was sent to the members, right?

16 A. I can't -- okay. January '45.

17 Q. I'm going too fast?

18 A. I see.

19 Q. Right down here. That was sent to the members,
20 right?

21 A. Members of the IHF, which included numerous
22 governmental entities and universities and corporations
23 received this.

24 Q. And Owens-Illinois?

25 A. And Owens-Illinois.

1 Q. Okay. And in this particular publication there's a
2 statement: these are abstracts of medical literature that
3 has been published, right?

4 A. That's correct.

5 Q. Okay. And that makes it more convenient for the
6 members to read it in short synopsis, right?

7 A. That's correct.

8 Q. So here it talks about *Asbestosis and Pulmonary*
9 *Carcinoma*, H.W. Wedler. And this one was published in
10 1943 and it talks about --

11 A. In German.

12 Q. Right, in German. But the abstracts of course is in
13 English, right?

14 A. It is.

15 Q. Okay. "14 instances of malignant disease of the
16 lungs and pleura." And so this is ex -- 16%, this is in
17 excess of the proportion of the lung carcinoma. And it's
18 discussing autopsy records on asbestosis, right?

19 A. It's looking at the connection between asbestosis
20 and lung cancer.

21 Q. So that's the number of cases being reported of lung
22 cancer, right?

23 A. Those are case studies of, you know, people with
24 asbestosis who have gotten lung cancer.

25 Q. Another publication of -- this is the *Foundation*

1 *Facts* page and this is August 1949, again sent to the --
2 distributed to the members, right, of the IHF?

3 A. Yes.

4 Q. Okay. So this one talks about analysis of
5 asbestosis and cancer of the lungs in an editorial, JAMA,
6 August 13th of 1949. Here the records of the English,
7 American and German physicians in the *Annual Report of*
8 *the Chief Inspector of Factories* in English -- England
9 for '47 show the occurrence of cancer related to
10 pulmonary asbestosis. And it says the incidence rate of
11 cancer in lungs asbestosis being 10 to 15 times as high
12 as among the general population. So once again, that
13 information got to O-I, right?

14 A. It did. And these are the sorts of case studies
15 that prompted through Richard Doll's study.

16 Q. The National Safety Council was another organization
17 that Owens-Illinois was part of. And I think Mr. Hazard
18 specifically was an officer in one of the sections,
19 right?

20 A. Owens-Illinois founded the Glass and Ceramic section
21 of the National Safety Council.

22 Q. And the National Safety Council also had
23 publications about asbestos-related diseases that would
24 have found their way to Owens-Illinois's people during
25 Kaylo times, right?

1 A. There were publications. They did receive the
2 *National Safety News* and the *Transactions*. And if there
3 were anything on that, they would have received that.

4 Q. Okay. I spilled my water. Not too much in there.
5 The safety manual that you found at Badger, did you find
6 any evidence that Owens-Illinois had had a copy of that
7 in their files and was relying on that when Kaylo was
8 being shipped to Badger?

9 A. I have not seen a connection between those two.

10 Q. Did you have any information that Owens-Illinois had
11 any knowledge about the specific safety practices that
12 Badger was employing?

13 A. I've seen absolutely no correspondence between the
14 two entities.

15 Q. You testified or would you agree with the statement
16 that the 5 million particles per cubic foot is not an
17 effective standard?

18 A. It lasted until the late 1960s. But of course
19 today, you know, looking back with 20/20 vision, we could
20 say it was not effective, but -- and that's most
21 unfortunate -- but it has proven not to be effective as
22 they thought it had been.

23 Q. The asbestos in the materials like pipe covering was
24 more dangerous, you're saying, than what was originally
25 reported?

1 A. We'll learn in the 1960s that that occupation is in
2 fact not as safe as thought it would -- as it was
3 believed to have been.

4 Q. Right. But the product that was being sold back in
5 the 40s and the 50s, that product, whatever asbestos in
6 it, was -- whatever dangers, were the same back then as
7 they would be 10 or 15 years later in a product, right?

8 MR. CASMERE: Object to the form of the
9 question. I can't even understand it.

10 THE COURT: Right. I'll sustain to the form.
11 You've got two minutes left.

12 BY MR. MCCOY:

13 Q. The formula for Kaylo was not changed substantially,
14 as far as asbestos content, over the time period from
15 when commercial operation began in 1948; is that a fair
16 statement?

17 A. They did create a high-temp Kaylo towards the latter
18 part of production that had a different -- it had amosite
19 in it.

20 Q. More amosite asbestos, right?

21 A. I believe they substituted the amosite for the
22 crocidolite that was in the low-temp variety.

23 Q. But the percentage --

24 MR. CASMERE: I'll stipulate that the percentage
25 stayed relatively the same between 1948 and 1958, Your

1 Honor.

2 THE COURT: Stipulation accepted.

3 BY MR. MCCOY:

4 Q. You would agree that the TLVs that were in
5 place before the 19 -- before 1970, those were not
6 designed to be protective for mesothelioma; is that
7 right?

8 A. I think as our understanding of mesothelioma matures
9 we'll realize certainly that the TLV is not protecting
10 against that.

11 Q. Okay. And they were not designed with that scenario
12 of mesothelioma --

13 A. We didn't know --

14 Q. -- protection in mind?

15 A. -- we didn't know about it.

16 Q. But in 1952 it was out there, right?

17 A. You can find a case study, but that does not lead to
18 a change in policy.

19 THE COURT: Okay. Let's wrap it up, Mr. McCoy.

20 BY MR. MCCOY:

21 Q. Alternative products were available during the time
22 period that Owens-Illinois was manufacturing Kaylo?

23 MR. CASMERE: Objection to form. Foundation.
24 Beyond the scope of this witness, Your Honor.

25 THE COURT: You're done. You've had your 90

1 minutes.

2 MR. MCCOY: I called him as my witness. I want
3 to --

4 THE COURT: You're done. Mr. McCoy, you heard
5 me before. Don't try to back door the Court or you will
6 be in big trouble. Do you understand?

7 MR. MCCOY: I understand.

8 THE COURT: Thank you.

9 MR. CASMERE: No questions, Your Honor.

10 THE COURT: Didn't think so. Dr. Neushul, you
11 are done. You are free to go about your business. Thank
12 you. All right. Counsel, do you want a break?

13 MR. CASMERE: No. If it's okay with the court
14 reporter and Your Honor, I'll go grab Dr. Neushul -- or
15 Dr. Gregory and I'll send him in.

16 THE COURT: Well, let's check with opposing
17 counsel. They're entitled to a quick comfort break if
18 they need it. Mr. McCoy, would you or Mr. Suoja or
19 anyone else just want five minutes?

20 MR. MCCOY: It's -- are you fine?

21 THE COURT: Let's take five --

22 MR. CASMERE: Yes, sir.

23 THE COURT: -- then come right back.

24 (Recess at 3:03 p.m. until 3:08 p.m.)

25 THE COURT: Counsel, we're back on the record.

1 Mr. Watson, do you want to just announce your witness so
2 we can swear him?

3 MR. WATSON: Your Honor, Owens-Illinois calls
4 Earl Gregory.

5 THE COURT: Now the oath.

6 **EARL GREGORY, DEFENDANT'S WITNESS, SWORN**

7 DIRECT EXAMINATION

8 BY MR. WATSON:

9 Q. Good afternoon, sir. Would you please introduce
10 yourself and give us your background briefly?

11 A. Earl Daniel Gregory. I'm a certified industrial
12 hygienist and I have a master's degree in industrial
13 hygiene as well as a Ph.D. in industrial hygiene from the
14 University of Cincinnati.

15 Q. Dr. Gregory, I conferred with plaintiff's counsel
16 and Exhibit 1164 is your CV. And Owens-Illinois offers
17 Exhibit 1164 as a Rule 1006 summary of your
18 qualifications.

19 MR. WATSON: Mr. McCoy, do you agree?

20 MR. MCCOY: No objection.

21 THE COURT: All right. We'll accept it.

22 BY MR. WATSON:

23 Q. Dr. Gregory, I want to provide to the Court an
24 overview of the four topics we asked you to research and
25 evaluate in this case. Is that fair?

EARL GREGORY - DIRECT

1 A. Yes.

2 Q. We first asked you to evaluate whether Mr. Suoja was
3 ever exposed to asbestos from Owens-Illinois Kaylo.

4 A. That's correct.

5 Q. What was your conclusion?

6 A. My conclusion, based on all the testimony and the
7 documents that I've reviewed in this case, was that there
8 was no evidence that he was exposed to asbestos from
9 Owens-Illinois thermal insulation products.

10 Q. We, second, asked you to evaluate what
11 responsibilities the employers, jobsite owners, jobsite
12 possessors and controllers had to protect Mr. Suoja; is
13 that right?

14 A. That's correct.

15 Q. What were your conclusions?

16 A. Well, employers, jobsite controllers, and jobsite
17 owners or premises owners have the responsibility, the
18 duty and the authority and the obligation to protect all
19 employees from occupational safety and health hazards.

20 Q. The third thing we asked you to do was evaluate the
21 concept of the threshold limit value and its importance
22 in this case, right?

23 A. That's correct.

24 Q. What was your conclusion, Dr. Gregory?

25 A. Well, the threshold limit value during the time

1 period when Mr. Suoja worked at the Badger Ordinance was
2 5 million particles per cubic foot. In fact it had been
3 5 million particles per cubic foot since about 1938 and
4 it remained that way until approximately 1970. And that
5 was considered during that time period to be a safe
6 exposure level that as long as exposure levels were below
7 the 5 million particles per cubic foot, then employees
8 exposed below those levels would not suffer any adverse
9 health effects or occupational diseases while working
10 with asbestos-containing products.

11 Q. Dr. Gregory, the fourth topic that we asked for your
12 research and evaluation was to evaluate whether putting a
13 warning on a package of Owens-Illinois Kaylo would have
14 affected Mr. Suoja's asbestos exposure at all. Did you
15 reach a conclusion?

16 A. Yes, I did.

17 Q. What was your conclusion, Dr. Gregory?

18 A. In my opinion, it would not have had any effect at
19 all on his exposures to any Owens-Illinois
20 asbestos-containing thermal insulation products.

21 Q. Have you researched and formed those opinions to a
22 reasonable degree of scientific certainty in your
23 industrial hygiene?

24 A. Yes, I have.

25 Q. Let's talk generally about the types of materials

1 you reviewed in this case. Does it include the
2 admissions and statements in written discovery?

3 A. Yes, it does.

4 Q. Does it include the Asbestos Trust claims?

5 A. Yes, it does.

6 Q. Asbestos Trust affidavits?

7 A. That's correct.

8 Q. And the complaint by Mr. Suoja?

9 A. Yes.

10 Q. It also includes testimony in this case --

11 A. Yes.

12 Q. -- including George Schlub, Larry Zimmer, Harold
13 Haase, Frank Hofstetter and others?

14 A. That's correct.

15 Q. You also reviewed historic records about the Badger
16 Ordinance facility?

17 A. That's correct.

18 Q. Inspector journals?

19 A. That's correct.

20 Q. Wisconsin industrial regulations?

21 A. That's also correct.

22 Q. Federal regulations, including the Walsh-Healey Act?

23 A. That's correct.

24 Q. And records from Owens-Illinois during the relevant
25 time frame?

1 A. That's correct.

2 MR. MCCOY: Can I renew my MIL objection on the
3 trust fund materials, bankruptcy materials?

4 THE COURT: Understood. And just so the record
5 is self-contained at this point, it's a standing
6 objection. It will be resolved in post-trial briefing.
7 With that, let's continue.

8 BY MR. WATSON:

9 Q. Are these the types of records that you and other
10 experts in the industrial hygiene field would reasonably
11 rely on in forming your opinions in this case?

12 A. That is correct.

13 Q. You also requested records from the prior state
14 court lawsuit involving Mr. Suoja; is that right?

15 A. That's correct.

16 Q. You understand that those weren't produced in this
17 case and that the plaintiff's attorney asserts that their
18 file was lost; is that right?

19 A. That is my understanding.

20 Q. Would that information be helpful to you?

21 A. Yes, of course. Any information involving his
22 potential exposure to asbestos-containing products,
23 including specific work activities that he performed,
24 would have been helpful.

25 Q. Let's turn to your first conclusion that you gave us

1 initially, Dr. Gregory. How did you reach that
2 conclusion --

3 A. Well --

4 Q. -- of whether Mr. Suoja was ever exposed to an
5 Owens-Illinois product?

6 A. Well, based on Mr. Zimmer's and Mr. Schlub's
7 testimonies, who -- they testified that they worked with
8 Mr. Suoja at the Badger Ordinance.

9 And Mr. Zimmer, for example, said he worked with
10 Mr. Suoja in late 1958, but he didn't indicate that
11 Mr. Suoja was working with any Owens-Illinois Kaylo
12 products. He just stated that Mr. Suoja was at the
13 jobsite. And of course the jobsite is around 7,500 acres
14 with over 1,400 buildings. So but Mr. Zimmer didn't say
15 that he saw Mr. Suoja remove or install any
16 Owens-Illinois thermal insulation products. So there's
17 just no evidence from his testimony that Mr. Suoja was
18 working with any O-I thermal insulation products.

19 Now, Mr. Zimmer did say that others -- other
20 insulators that he was an apprentice to -- Mr. Zimmer was
21 an apprentice during that time period -- he said that it
22 was his opinion that other insulators were removing Kaylo
23 products, but he did not say that Mr. Suoja was
24 performing such activities.

25 And then for George Schlub, he indicated that he

1 worked with Mr. Suoja at the Badger facility in around
2 1967 for on and off maybe five to six months. And he
3 indicated that -- Mr. Schlub stated that he removed what
4 he felt was Kaylo insulation from piping. And he defined
5 the Kaylo insulation as 85% magnesia. And Kaylo is a
6 calcium silicate thermal insulation product and it's not
7 an 85% magnesia product. There are two different types
8 of thermal insulation products.

9 And he based his opinion that he was removing Kaylo
10 on the fact that other insulators stated that in the 40s
11 the Kaylo was installed when the facility was being
12 built. But in fact O-I Kaylo was not commercially
13 available until 1948, and we know that the Badger
14 facility was up and running in January of 1943, so it
15 couldn't have been Kaylo that was installed during the
16 initial construction of that facility. And, also, Kaylo
17 is not an 85% magnesia product; it's a calcium silicate
18 product.

19 And he indicated that the purpose -- Mr. Schlub
20 indicated that the purpose of his activities during that
21 time period at the Badger facility was to recover damaged
22 and weathered pipe insulation that had been exposed to
23 rain and dust from dust blowing in the fields outside
24 where the pipe covering existed. And he described the
25 insulation as weathered and falling apart and

1 deteriorated.

2 But calcium silicate products, which included the
3 Kaylo, the O-I Kaylo product, is not soluble in water and
4 it doesn't break down in water and it stands up very well
5 to weather conditions, including high humidities and rain
6 and those kind of elements; whereas 85% magnesia, by
7 definition, is 85% magnesium carbonate, which is soluble
8 in water.

9 That was one of the reasons that the insulation
10 industry got away from the 85 magnesia product, because
11 it did break down in wet environments, particularly
12 outdoors in the rain where the humidity was high. And
13 they got away from that 85 magnesia product and went to a
14 calcium silicate product which is not soluble, it doesn't
15 deteriorate in high moisture conditions.

16 Q. What product, in your opinion, is Mr. Schlub most
17 likely identifying?

18 A. Well, since he stated that he was told by other
19 insulators that the insulation was put on back during the
20 40s during the building of the plant, and based on the
21 pictures that I saw with all the evidence, the product
22 that was being installed was Johns Manville 85% magnesia.

23 MR. MCCOY: Your Honor, objection. I don't
24 think that's been disclosed in his opinion.

25 THE COURT: I'll tell you what, I'll let the

1 testimony stand. If you're right in the briefing, I can
2 strike that opinion. But we'll just keep going today,
3 okay?

4 BY MR. WATSON:

5 Q. Is it your opinion that the product that Mr. Schlub
6 is identifying was not Owens-Illinois Kaylo?

7 A. That's my opinion. Based on the fact that
8 Mr. Schlub testified that it was an 85% magnesia product,
9 but Kaylo is not an 85% magnesia product; and he
10 testified that it was weathered and had been broken down
11 and deteriorated by rain and the outdoor environment; and
12 the fact that he said that the other insulators indicated
13 that the insulation had been installed during the initial
14 construction of the plant; and based on the photographs
15 that I saw; 85% magnesia manufactured by Johns Manville
16 was being installed during the construction of that
17 plant.

18 Q. So, in your opinion --

19 MR. MCCOY: Same objection.

20 THE COURT: Understood.

21 BY MR. WATSON:

22 Q. In reading Mr. Schlub's deposition testimony; even
23 though he uses the term *Kaylo* to identify the material,
24 is it your opinion that the material that he's
25 identifying is not Owens-Illinois Kaylo?

1 A. That's my opinion, right, that it's not
2 Owens-Illinois Kaylo thermal insulation products and that
3 most likely it's an 85% magnesia product manufactured by
4 Johns Manville as well as some other manufacturers during
5 that time period.

6 Q. Let me talk more about Mr. Zimmer's testimony and
7 your opinions about Mr. Zimmer's testimony. How large,
8 in your review of the record, was the Badger Ordinance
9 facility?

10 A. It was, based on the historical records that I
11 reviewed, it was 7,500 acres.

12 Q. How many hundreds of miles in the historical records
13 of overhead pipeline and insulated pipeline was there at
14 Badger Ordinance?

15 A. I saw one statement indicating there was over 200
16 miles of such pipeline.

17 Q. What is your opinion about if somebody is simply
18 present at a jobsite that's the size and scope of 7,500
19 acres with 200 miles of steam lines, that one individual
20 testifying about asbestos work is necessarily identifying
21 the exposures that another individual would have anywhere
22 on the jobsite?

23 A. My opinion is in order to determine whether someone
24 was exposed to the same situation that you were exposed
25 to, there has to be evidence that that person was

1 performing a similar job in close proximity to where the
2 individual was working.

3 In other words, just because you are two insulators
4 working at the same jobsite, one could be on one end of
5 the jobsite, the other could be on the other end of the
6 jobsite. One could be performing activities that are
7 totally different from the other person.

8 Q. And how did Mr. Zimmer identify the product that he
9 called *Kaylo*?

10 A. He called it a *white, smooth product*.

11 Q. Did Mr. Zimmer testify that he actually performed
12 the work?

13 A. No. In fact he stated that as an apprentice, he
14 wasn't allowed to touch the product. He had other duties
15 that he had to perform before he was able to be a
16 journeyman insulator.

17 Q. What insulation products would fit Mr. Zimmer's
18 description of a smooth and white pipe covering?

19 A. Well, most thermal insulation pipe covering during
20 that time period -- and even after that time period and
21 before that time period, for that matter -- were white
22 and smooth. I mean, I can only think of one particular
23 product that could not be described as white and smooth.
24 And I base that on the fact that I've seen it in
25 different plants where I've worked as well as I've read

1 the testimonies of many insulators who had described
2 insulation that they have removed. And in most cases,
3 most pipe covering insulation was white and smooth.

4 MR. MCCOY: Your Honor, I'd like to again make
5 that same objection that I don't believe this is
6 disclosed.

7 THE COURT: Okay. Understood. We can resolve
8 it later. For now the testimony stands subject to being
9 stricken later. Let's keep going.

10 BY MR. WATSON:

11 Q. Have you reviewed the *Federal Register* of
12 identifying information of asbestos-containing products?

13 A. Yes, I have, the 1990 edition.

14 Q. Are you familiar with that document?

15 A. Yes, I am.

16 Q. Does that -- what does that document show?

17 A. Well, the Federal Government EPA, in 1990, asked all
18 manufacturers or former manufacturers of
19 asbestos-containing products to disclose the identity of
20 that product, the composition of that product, the
21 physical appearance of that product, and the years that
22 it was manufactured and the amount of asbestos and type
23 of asbestos that was contained within those products.
24 That was published in 1990 from all responding companies.
25 And in there you'll see that many of the companies that

1 produced thermal insulation pipe covering or block
2 insulation, they described their product as white in
3 color.

4 MR. MCCOY: Same objection, Your Honor.

5 THE COURT: And it stands.

6 BY MR. WATSON:

7 Q. I'm now showing you on the screen, Owens-Illinois
8 Exhibit 1258. Do you see that document?

9 A. Yes, I do.

10 Q. Is that the same *Federal Register* that you were
11 talking about before?

12 A. That is.

13 MR. WATSON: Your Honor, we offer Owens-Illinois
14 Exhibit 1258.

15 THE COURT: Do you want to object or save it for
16 later?

17 MR. MCCOY: As long as we have that standing
18 objection.

19 THE COURT: Sure. And with the exhibits,
20 Mr. Watson, we don't need to offer during the testimony
21 because you guys are going to go through that exercise
22 tonight.

23 MR. WATSON: It's a force of habit that's been
24 drilled into me, Your Honor.

25 THE COURT: Hard habit to break, I understand

1 that, but we'll reserve.

2 BY MR. WATSON:

3 Q. In your opinion, is the description of "smooth and
4 white insulation product" consistent with Armabestos pipe
5 covering?

6 A. Well, based on what I have read, it is, yes.

7 Q. Is your description of "smooth and white pipe
8 covering" consistent with a product like Careytemp
9 insulation?

10 A. Yes, it is.

11 Q. Is your -- in your opinion, is the description of a
12 product that's "smooth and white" consistent with Johns
13 Manville 85% magnesium?

14 A. Yes, it is.

15 Q. Is the description consistent with many other
16 insulation products?

17 A. Yes, it is.

18 Q. Owens-Illinois fiberglass that was made in the
19 1960s; is that true?

20 A. Yes.

21 Q. In your opinion, why is it highly unlikely that an
22 insulator like Mr. Schlub or Mr. Zimmer could even
23 identify the brand of insulation that's been installed on
24 a pipeline?

25 MR. MCCOY: It's part of the standing objection.

1 THE COURT: You've got it.

2 A. Well, once the product is removed from the container
3 and installed on the piping, it all looks the same, with
4 the exception of again one product that I'm aware of
5 called *Unibestos*.

6 Q. And did you see in the record any evidence of
7 Unibestos being installed at Badger Ordinance?

8 A. Yes, I did.

9 Q. By whom?

10 A. Well, Frank Hofstetter indicated that when he worked
11 at the Badger Ordinance in '53, '54, '55, he wasn't sure
12 of the years, that he installed Unibestos as well as 85%
13 magnesia pipe covering.

14 Q. In your review of the record, what's the take-away
15 from this first part of your opinion about whether
16 Mr. Suoja was ever exposed to an Owens-Illinois product?

17 A. Well, there's just no evidence, from what I have
18 reviewed, that indicated Mr. Suoja was exposed to
19 Owens-Illinois Kaylo thermal insulation products.

20 Q. Now, Mr. Suoja worked for 40-plus years as a union
21 insulator, right?

22 A. That's correct, 41 years.

23 Q. Did you reach a conclusion about his exposures to
24 asbestos-containing products other than Owens-Illinois
25 Kaylo?

1 A. He most certainly, as an insulator over all those
2 years, particularly up until about 1973 -- after 1973,
3 asbestos-containing thermal insulation products were no
4 longer manufactured -- but from '43 to the end of '73 he
5 certainly had significant exposures to
6 asbestos-containing products; not only thermal
7 insulation, but cements, possibly sprays, textiles are
8 asbestos-containing cloth, and blanket material and
9 several other types of asbestos-containing materials that
10 he'd encounter as an insulator and that he was near while
11 other people were working with them.

12 Q. What exposure levels or is there a study that shows
13 what exposure levels you would expect a union insulator
14 performing those types of duties would sustain?

15 A. The best one that would be most relevant in this
16 case would be the Balzer and Cooper 1968 studies of
17 contractors who performed light and heavy industrial
18 construction operations. And they were insulators who
19 were using various asbestos-containing thermal insulation
20 as well as asbestos-containing cements or mud and
21 asbestos-containing cloth in the building of office
22 buildings and industrial plants and all types of
23 construction projects.

24 And those studies that were done were fairly
25 comprehensive. They took a lot of air samples, evaluated

1 a lot of insulators, and they reported some average
2 exposure levels during certain activities that insulators
3 are involved with.

4 Q. Could you give the Court at least a hierarchy of the
5 types of work and corresponding types of exposure levels
6 that a person would have performing that work?

7 A. Well, an insulator does several different tasks.
8 First of all, they have to prepare their insulation to be
9 installed. Now, sometimes that's done in a shop away
10 from the jobsite. But in most cases, and in the
11 construction trades, it's done right at the building
12 that's being constructed.

13 So there's cutting of the material, there's cutting
14 of angles, because they have to fit around elbows and Ts,
15 around valves and things like that. So there's a lot of
16 preparation and cutting work that goes on.

17 And then once they start installing the thermal
18 insulation, then they have to put an insulating cement
19 around it. So they have to do mixing. Sometimes they
20 mix, other times the apprentice does the mixing of the
21 cement material, which is basically a cement material
22 with asbestos that you mix in a powder form, and you add
23 water and you essentially trowel it on and smooth out all
24 the uneven parts of the thermal insulation that you've
25 installed, particularly around joints or between the

1 sections of the molded insulation that you're putting on
2 the piping or on the vessels.

3 And then depending upon the specification required
4 for the insulation job, there's also a finish coat of
5 either a canvas material or an asbestos cloth that goes
6 over the cement material and ends up being a nice, smooth
7 finish. In some cases they don't put the asbestos cloth
8 on, they just finish off the insulating cement, and in
9 some cases they paint over the insulating cement or the
10 canvas or the asbestos cloth.

11 Q. Could we move to Topic No. 2, Dr. Gregory?

12 A. Yes.

13 Q. And that was the topic where we asked you to
14 evaluate what responsibilities the employers and jobsite
15 owners and jobsite controllers had to protect Mr. Suoja.
16 And could you give us again what your conclusion was?

17 A. Well, they have the responsibility, when they hire
18 someone or bring them onto their premises or to their
19 construction site, to pay them for their activities, but
20 not to in any way harm their health or their safety. So
21 they have a contract with that employee to provide them a
22 safe and healthful workplace so that when they leave that
23 jobsite the only thing they are is tired, they're not
24 overexposed, they have all their fingers and their toes.

25 And the employer controls in the jobsite. The

1 controller and the premise controller, they control
2 everything. Whenever you hire and you fire, you control
3 everything: you control the material, you control the
4 hires, you control the procedures, you control the
5 activities. Just everything that goes on in the
6 workplace, the employer and the jobsite controllers
7 control.

8 That's the reason that OSHA regulations and all
9 state regulations and the Walsh-Healey regulations put
10 the accountability for protecting employees on the
11 employer and jobsite controllers, because they have the
12 ability, the authority and the duty and the
13 responsibility to protect all the employees that they
14 employ or that are on their jobsites.

15 Q. Are you familiar with a hierarchy of controls in
16 industrial hygiene?

17 A. Yes. Ever since the 1930s there's been what's
18 called the *industrial hygiene hierarchy of controls*. And
19 it basically is three different control methods that
20 start out with the best control being engineering
21 controls; in other words, catch the material, contain the
22 material before it gets to the employee's breathing zone
23 using engineering controls such as ventilation,
24 isolation, wet-down methods; all of those types of
25 procedures. Those are engineering controls.

1 The next level under that hierarchy, and --

2 Q. Can I stop you right there, Dr. Gregory?

3 A. Sure.

4 Q. You have for us Exhibit 1198, which I'm showing you
5 now. And do you recognize this document?

6 A. Yes, I do.

7 Q. And could you tell us what Exhibit 1198 shows?

8 A. That's the hierarchy of controls. And since the
9 1930s, there's been a couple of levels added:

10 Elimination and substitution. In other words, if you can
11 eliminate the hazardous material, you don't have to worry
12 about control. So it's not really a control method; it's
13 eliminating the material so that there's no need to have
14 any control.

15 But the last three sections are the *classic*
16 industrial hygiene hierarchy of controls. Engineering
17 controls, for example, they're in the gold and the
18 yellow. That's engineering wet methods, any way that you
19 can contain and isolate and prevent the air contaminant
20 from getting to the employee's breathing zone.

21 The next hierarchy of control is administrative
22 control. That just means that you limit the person's
23 exposure to a potentially hazardous air contaminant by
24 reducing the number of hours they're exposed to that
25 material so that over an eight-hour day or over a 40-hour

1 week their exposure level is within the TLVs or
2 permissible exposure limits.

3 And the last one, and what is considered the least
4 effective, but sometimes it's the only effective method,
5 and that's the use of personal protective equipments.

6 So, in other words, if your engineering controls
7 aren't successful in controlling and containing the
8 contaminant before it gets to the worker's breathing
9 zone, and if your administrative controls aren't
10 successful and feasible in reducing the employee's
11 exposure to within the safe limits, then you use a
12 respirator. A respirator just filters out the air
13 contaminant before it reaches the employee's lungs. So
14 that is the last means of control, but in some cases the
15 only effective means of control.

16 Q. And I'm showing you now page 3 of that same exhibit.
17 Is that essentially a summary of the hierarchy controls
18 that you've described?

19 A. Yes, it is.

20 Q. Why are Mr. Suoja's employers in the best position
21 to insure workplace safety?

22 A. Well, if we look at these controls; engineering
23 controls, that's ventilation, building isolation systems
24 to control the dust, keep it away from the employee's
25 breathing zone. Only the employer, the jobsite owner and

1 the premise owner can do that. They are the only ones
2 that have authority at that workplace to install
3 ventilation and to put in isolation techniques.

4 And they have of course the resources to do it.
5 They know where the operation is occurring, they know
6 under the conditions that the operation is being
7 performed, and they know when they need to put in
8 engineering controls.

9 And the same with administrative controls: if you
10 want to limit an insulator's cutting of thermal
11 insulation or mixing of asbestos-containing cement to two
12 hours versus four hours, the only one that can do that is
13 that person's boss, the employer or the general
14 contractor that comes to the subcontractor and says, "I
15 want you to limit it to reduce this guy's exposure by
16 using administrative controls. If you don't do it, get
17 off our property." So they have control, too, just like
18 the premise owners.

19 Personal protective equipment is something that I've
20 fought throughout my whole career of trying to get people
21 to wear what they know they need to wear to protect
22 themselves. In fact the last day that I was in private
23 industry I had to fire one of our employees who I told
24 three times to wear a respirator while they were
25 unloading a toxic chemical from a tank car. And even

1 though that was my last day, you'd think I'd be
2 benevolent.

3 I told him, "This is the third time I told you. I'm
4 going to go to your boss. I'm going to recommend that
5 you be terminated because I can't stand leaving this
6 place knowing that you're not taking the precautions that
7 are necessary to protect you from overexposure to
8 methylene chloride," which is a suspected carcinogen.

9 So getting people to wear respirators has always
10 been a challenge. And that's the reason why the other
11 controls are preferred, because you're not depending upon
12 the employees. Now, some employees are very
13 conscientious and will wear their protective equipment.
14 But most people have other motivators that motivate them
15 against the motivation to work safely. And those are
16 things like being comfortable, avoiding taking extra
17 effort or extra time or being able to get through the job
18 quickly.

19 And so what you have to do to counter those bad
20 motivators that encourage people to take the comfortable
21 way out -- it's uncomfortable to wear a respirator, so
22 most people will avoid that discomfort and assume the
23 risk of being overexposed -- but it's up to the employer
24 to say, "That's not going to happen. If you're going to
25 work here, you're going to protect yourself. I'm not

1 going to allow you to be overexposed."

2 Q. How would employers and jobsite owners obtain
3 information about the potential hazards or dangers from
4 asbestos-containing products?

5 A. Well, in this particular case the State of
6 Wisconsin, since 1947, had adopted the threshold limit
7 value for asbestos of 5 million particles per cubic feet.
8 That's the Industrial Commission of Wisconsin that
9 promulgated that law way back then. And, also,
10 Walsh-Healey, that standard came out in 1942 and that
11 adopted the American Conference of Governmental
12 Industrial Hygienists TLV for asbestos, which is --

13 Q. And the Wisconsin Industrial Commission and the
14 Walsh-Healey Act would describe threshold limit values,
15 ventilation, protection of individuals, equipment and
16 other maintenance controllabilities on the jobsite; is
17 that right?

18 A. That's correct. They're essentially following the
19 hierarchy of controls as far as engineering controls,
20 administrative controls and personal protective
21 equipment.

22 Q. In your opinion, who is primarily at fault for
23 Mr. Suoja's overexposure to asbestos during his career?

24 A. Well, the person or the company, the individuals
25 that control the work activities of Mr. Suoja, which

1 would have been his employer, the jobsite controller or
2 the premise owner. Any one of them could have insisted
3 that he be protected from overexposures to asbestos.

4 Q. I want to briefly, since I've mentioned it before,
5 Topic No. 3, which was to evaluate the concept of
6 threshold limit value and its importance in this case;
7 very briefly, could you describe for the Court what
8 exactly is the TLV or threshold limit value?

9 A. The TLV is an eight-hour, time-weighted average
10 limit and it essentially gives airborne concentrations of
11 substances below which it is believed that nearly all
12 employees or workers may be exposed to for eight hours a
13 day, 40 hours a week, through a working lifetime without
14 suffering adverse health effects or occupational
15 diseases.

16 Q. You've mentioned 5 million particles per cubic foot
17 TLV, right?

18 A. Yes.

19 Q. Could you tell the Court what exactly that means?

20 A. Well, that is the -- that was the TLV for asbestos
21 from 1938 to about 1970.

22 Q. How would someone determine the exposure levels in
23 order to compare it against the threshold limit value?

24 A. You have to do air monitoring in the employee's
25 breathing zone, and there's various devices that have

1 been used in the field of industrial hygiene.

2 And basically you just sample in the breathing zone
3 and you collect the amount of dust that's in that
4 employee's breathing zone. And then you analyze it,
5 essentially count the particles or the fibers of
6 asbestos. And then you keep track of the amount of air
7 that you've sampled so that you can indicate the number
8 of particles per cubic feet of air that that employee was
9 exposed to in their breathing zone.

10 Q. We heard something yesterday about conversion
11 factors from fibers per cc. Could you tell us what
12 exactly the conversion factor is?

13 A. Yes. The ACGIH in 1970, when they converted from
14 million particles per cubic feet to fibers per cc, used a
15 factor of 6. And that's defined as 1 million particles
16 per cubic feet equals 6 fibers per cc. In fact when they
17 published in 1970, when they published their new
18 standard, which was 2 million particles per cubic feet,
19 they also published it as 12 fibers per cc.

20 Q. Is it your understanding that the Industrial
21 Commission of Wisconsin was actually available to go do
22 sampling at jobsites?

23 A. Yes. In fact I was surprised to see that they had
24 an industrial hygienist in 1937, a man by the name of
25 *William Fluck*. And he worked for the Wisconsin Board of

1 Health Industrial Hygiene Unit. And after reading his
2 deposition, I found out that during that time period they
3 were active in investigating requests or complaints from
4 employers or from unions to go into plants. And they did
5 air monitoring for all the different air contaminants
6 that existed in various industrial operations, including
7 asbestos.

8 Q. Were the TLVs and permissible exposure levels
9 considered state of the art, in terms of industrial
10 hygiene, from the 1930s through 1968?

11 A. Yes, they were. I mean, that's what we based all of
12 our industrial hygiene practice on. In fact I remember
13 in 1974, when I just got out of graduate school and I was
14 industrial hygienist for the Occupational Safety Health
15 Administration, I was going around, under the new Health
16 Hazard Program for Asbestos that had been developed, and
17 I was doing a lot of air monitoring for asbestos.

18 And I would tell the employers, you know, if you
19 keep your employees' exposure levels below this
20 permissible exposure limit, which at that time in 1974
21 was 2 fibers per cc, then your employees are not going to
22 suffer adverse health effects, because this permissible
23 exposure limit was adopted from the TLVs and it's been
24 shown to be a safe level of exposure.

25 Q. Would jobsite owners, employee -- employers,

1 premises owners, know about the threshold limit values
2 for asbestos from the Wisconsin Industrial Commission
3 orders?

4 A. Yes.

5 Q. Would they know about it from the Walsh-Healey Act?

6 A. They should have known. When you hire someone or
7 when you put out a contract for someone to do work on
8 your property or if you're a general contractor and
9 you're hiring a subcontractor, you have the obligation
10 and the duty to make sure that you're aware of all
11 occupational safety health standards that apply to that
12 operation and to make sure that your subcontractors are
13 complying with those safety and health regulations.

14 Q. Would that include L&S Insulation at Badger
15 Ordinance?

16 A. Yes, it would.

17 Q. Would that include the United States of America at
18 Badger Ordinance?

19 A. Yes, it would.

20 Q. Would that include Owen Corporation, the controller
21 of Badger Ordinance?

22 A. Yes, it would.

23 Q. Threshold limit values and permissible exposure
24 levels are still in existence today, aren't they?

25 A. Yes, they are.

1 Q. The numbers are just lower?

2 A. That's correct.

3 Q. In your opinion, what is the significance about
4 threshold limit value in the 1940s and 1950s, in your
5 industrial hygiene opinion, during the time that
6 Owens-Illinois made and sold Kaylo in the 1940s and
7 1950s?

8 A. Well, the threshold limit value at that time was
9 5 million particles per cubic feet and it was not
10 challenged by any industrial hygienists or medical
11 doctors or safety health regulators. It was considered
12 to be a safe exposure level that as long as exposures did
13 not exceed that, occupational diseases would not occur.

14 Q. I want to change topics really quick. And you're
15 familiar with the Fleischer-Drinker report, aren't you?

16 A. Yes, I am.

17 Q. And you've assessed that from an industrial
18 hygienist perspective?

19 A. That is correct.

20 Q. Do you consider the Fleischer-Drinker study to be a
21 good look at the work practices and controls that an
22 operator can have in an environment?

23 A. Yes. Fleischer and Drinker, both two MDs, one an
24 admiral of the U.S. Navy, went in to, actually at the
25 request of the U.S. Navy, to evaluate the use of asbestos

1 in shipyards. And they not only did air monitoring, but
2 they evaluated engineering controls and they did x-rays
3 of all the insulators to try to determine whether or not
4 there was an increase incidence of asbestosis, which at
5 that time, that was the only recognized adverse health
6 effect from overexposure to asbestos was the development
7 of asbestosis.

8 Q. And at that time when Fleischer and Drinker did
9 those studies and published their findings, what were
10 their conclusions?

11 A. Their conclusion was that pipe covering was not a
12 dangerous occupation based on the fact that they only
13 found three cases of asbestosis in all of the employees
14 that they had x-rayed and based on the monitoring that
15 they had performed, which basically the results were
16 within the 5 million particles per cubic foot TLV of that
17 time period.

18 Q. If they used control methods and kept exposure
19 limits within the threshold limit values then you
20 wouldn't see adverse health consequences?

21 A. That's correct.

22 Q. Let's move to the fourth topic, Dr. Gregory, and
23 that was warnings. And we asked you to evaluate whether
24 putting a warning on a package of Owens-Illinois Kaylo
25 would have affected Mr. Suoja's asbestos exposure at all;

1 is that right?

2 A. That's correct.

3 Q. And your conclusion was, if I heard it before, it
4 would have no effect?

5 A. That's correct.

6 Q. Number one, Mr. Suoja was never exposed to an
7 Owens-Illinois product?

8 A. That's correct, based on the evidence that I've
9 reviewed.

10 Q. And the second is, what difference would a warning
11 have even made?

12 A. That's correct, because you still have to implement
13 these controls to reduce the exposure. You have to use
14 engineering, administrative or personal protective
15 equipment and Mr. Suoja would not have been able to do
16 that.

17 Also, there were no boxes around in '67.
18 Owens-Illinois stopped making thermal insulation products
19 April 30th of 1958 when they sold their thermal
20 insulation division to Owens Corning Fiberglas. And
21 there wouldn't have been any -- assuming, which is not
22 supported by the evidence, assuming Owens-Illinois Kaylo
23 would have been sold in that facility, which is not
24 supported by the evidence, the boxes would have been long
25 gone. So the boxes would not have served any purpose as

1 far as warning Mr. Suoja.

2 Even if there were a box there, the box -- the
3 warning does not give him the power to put in ventilation
4 controls to reduce the number of hours that he works or
5 to give him a respirator and wear a respirator. So it --
6 warnings do not do anything to reduce an employee's
7 exposure.

8 Q. What information would a warning have provided that
9 the employers and jobsite owners didn't already know?

10 A. Well, right. I mean, they were aware of the
11 Walsh-Healey Act. They were aware of the Industrial
12 Commission of Wisconsin's requirements for the threshold
13 limit value for asbestos. They were aware of engineering
14 controls. They were aware of the hazards of overexposure
15 to asbestos.

16 Q. What difference would that warning have made to
17 Mr. Suoja's union?

18 A. It would not have made any difference because the
19 Asbestos Workers Union, of all organizations, had more
20 knowledge about the hazards of asbestos than any other
21 organization in the country. I mean, they hired the
22 number-one authority on asbestos-related hazards in the
23 entire world, Dr. Irving Selikoff, around 1960 to do a
24 study of their workers to determine whether their workers
25 were at any increased risk of developing asbestos-related

1 diseases.

2 And that study resulted in a lot of good
3 information, and that information was sent out to the
4 Asbestos Workers Unions in quarterly publications that
5 gave them warnings about the potential hazards of
6 overexposure to asbestos, it gave them information on
7 their exposure levels to asbestos, and it gave them
8 information on how to control their exposures.

9 In fact in 1961 the Asbestos Workers Union published
10 a poster called the *Grim Reefer* -- *Reaper* poster. And it
11 has a picture of a family in one corner and the *Grim*
12 *Reaper* in the other.

13 THE COURT: We've actually seen it twice in this
14 trial.

15 THE WITNESS: Okay. I'm sorry.

16 THE COURT: You didn't know, but we're all
17 familiar with it.

18 A. Okay. You don't get more effective warning than
19 that. But as a result of that, in 1969 the Asbestos
20 Workers Union sent out questionnaires to their membership
21 and 12,000 members filled out that questionnaire. And
22 the purpose of that questionnaire was to find out how
23 well those warnings were working and to determine whether
24 employees were wearing the respirators. And the result
25 of that survey was only 7% of the union workers were

1 wearing their respirators full time, which is what you
2 need to do in order to protect yourself from overexposure
3 to asbestos as an insulator.

4 Q. How did the union communicate that information to
5 members of the union like Mr. Suoja?

6 A. That was published in what was called an *Asbestos*
7 *Workers Journal* magazine that went out quarterly.

8 Q. To all the union members?

9 A. To all the members, that's correct.

10 Q. Was this information that was available to
11 Mr. Suoja?

12 A. Yes. He should have received those publications.

13 Q. What difference did that *Grim Reaper* ad make in
14 terms of the conduct of asbestos workers?

15 A. Well, based on the results of the respirator
16 questionnaires, only 7% of the responders, 12,000 total
17 asbestos union workers, said that they wear their
18 respirators all the time, which is what they have to do
19 or had to do during that time period to reduce their
20 exposure levels to within safe limits.

21 Q. Did any manufacturer put a warning on its thermal
22 insulation product in the 1940s and 1950s?

23 A. Not that I'm aware of.

24 Q. When did warnings come on to thermal insulation
25 products?

1 A. In the mid 1960s is what I've found during my
2 research.

3 Q. Did the conduct of asbestos workers, including the
4 survey that you just told the Court about, change after
5 warnings went on thermal insulation products?

6 A. No. I mean, even the depositions that I read here
7 from Mr. Van Beck, who was the vice president of
8 Sprinkmann & Sons insulating contractor, he indicated
9 that the respirators were not enforced until OSHA came
10 around, which is just a crying shame that you have to
11 wait for the government to make you protect your
12 employees. But he admitted that.

13 And, also, Mr. Borchardt, who was a vice president
14 for L&S, indicated that he had heard in the 50s and the
15 60s about old insulators dying of asbestosis, but yet he
16 didn't enforce respirators until the advent of OSHA. He
17 said he supplied them, made them available.

18 But like the example I gave earlier: you can make
19 them available, but you have to motivate people to wear
20 them. And sometimes that takes the threat of not keeping
21 your job in order to get people to wear what they need to
22 wear to protect their health.

23 MR. WATSON: Thank you, very much, Doctor.

24 THE WITNESS: Your welcome.

25 THE COURT: All right. Cross-exam. Oh, do you

1 need a break? No. I'm sorry. I misunderstood your
2 gesture. Let's keep going.

3 CROSS-EXAMINATION

4 BY MR. MCCOY:

5 Q. Dr. Gregory, I just wanted to confirm, I have this
6 copy of your report which says filed 9/20/12 and signed
7 on September 18th, 2012. Is that what you know to be
8 your last version of this report?

9 A. No. There was actually a report in 2014 --

10 Q. Okay.

11 A. -- September 2014.

12 Q. I wanted to make sure.

13 THE COURT: You want to confirm that you sent
14 that over?

15 MR. WATSON: I can confirm multiple times we
16 gave a copy of it, even in our exhibits, and gave a copy
17 to them before this examination of Mr. Gregory commenced.

18 THE COURT: It was produced?

19 MR. WATSON: It was produced to them timely.
20 There was a court-ordered deadline for us to supplement
21 after remand. Plaintiff produced supplemental reports
22 and we produced supplemental reports. They were
23 exchanged. I'm happy to make an offer later to the
24 Court, including certificate of service, in order to show
25 that.

1 THE COURT: I'm fine.

2 MR. MCCOY: Judge, I just wanted to know if they
3 had a copy of the 2014.

4 MR. WATSON: I gave it to Mr. Hausman earlier.
5 I can get another copy.

6 MR. MCCOY: Yeah. Have you got another copy?

7 THE COURT: See if he's got it handy.

8 MR. MCCOY: Do you know what number it is? I'm
9 going to proceed while we're looking for it.

10 MR. CASMERE: We'll put it on the thumb drive
11 while you're going.

12 MR. MCCOY: Okay. The number is fine.

13 MR. WATSON: Your Honor, for the record, 1162 is
14 Earl Gregory's expert report.

15 MR. MCCOY: Okay. We'll pull that up.

16 MR. WATSON: Exhibit 1163 is Earl Gregory's
17 supplemental expert report.

18 THE COURT: And that would be the most recent?

19 MR. WATSON: That would be the most recent one
20 that Mr. Gregory just identified in 2014.

21 THE COURT: Understood.

22 MR. MCCOY: Okay. We'll pull that up. All
23 right.

24 BY MR. MCCOY:

25 Q. Thank you, Mr. Gregory. That's the question I had.

1 MR. CASMERE: Doctor.

2 BY MR. MCCOY:

3 Q. Dr. Gregory. First of all, I wanted to ask you
4 something. You had a lot of discussion about duties of
5 the places that own the properties and the employers and
6 so on. What is a manufacturer's responsibility, in the
7 context of a product like the Kaylo, back in the time
8 period in the 1940s and 50s, for -- as a manufacturer to
9 provide information?

10 A. Well, as a manufacturer, just like any manufacturer,
11 you're an employer who has employees, so you have the
12 same responsibility to protect your own employees against
13 the hazard of asbestos as any other employer that's using
14 an asbestos-containing product. So as an employer, they
15 have the same responsibilities.

16 Q. Okay. You're talking about the duties within the
17 context of industrial hygiene; is that what you're
18 referring to?

19 A. Yes, in the manufacturing plant there.

20 Q. Okay. What about a finished product leaving the
21 hands of a manufacturer, what type of information should
22 have been on that one? And again, I'm going back to that
23 time frame when O-I was manufacturing Kaylo.

24 A. Well, during that time period they were making a
25 product that contained asbestos. And they knew about the

1 potential hazards of asbestos, so they had monitoring
2 performed in their plant where they manufactured the
3 product. In fact they had the insurance company in and
4 they had an outside consulting group to do air
5 monitoring; plus they had their own industrial hygienist,
6 a person by the name of *Willis Hazard*, who did
7 monitoring. So their responsibility was to make sure
8 their own people were not overexposed to asbestos.

9 Q. Right. Just so I understand, are you saying that
10 the product manufacturer, from an industrial hygiene
11 perspective, had no responsibility for the product once
12 it left the manufacturing facility?

13 A. No. I'm just saying --

14 Q. Okay. All right. So that's what I'm trying to get
15 you to address.

16 THE COURT: I think you misunderstand each
17 other. Why don't you focus in more tightly on what you
18 want him to tell you.

19 BY MR. MCCOY:

20 Q. What is the responsibility, from the industrial
21 hygiene perspective, that the manufacturer had back in
22 that time period for the product that went out of its
23 manufacturing plant doors?

24 A. There were no responsibilities of a manufacturer to
25 provide any warning labels or any information on

1 asbestos-containing products back during that time
2 period. In 1983 that changed.

3 Q. I'm not asking about just asbestos-containing
4 products. I'm asking generally, from an industrial
5 hygiene perspective, what responsibility did the
6 manufacturer have for the product that was going out of
7 its doors?

8 A. From an industrial hygiene standpoint, only the
9 employer, the jobsite controller, the premise owner, the
10 people who have a contract with employees to provide them
11 a safe and healthful workplace, they're the only ones
12 with the responsibility, not the manufacturer.

13 Q. Okay. And so if we went to the industrial hygiene
14 literature in that period of time, what you're saying is
15 there's nothing addressing a manufacturer's
16 responsibilities, right?

17 A. I'm not aware of anything. At least when I was in
18 graduate school, we were taught that the responsibility
19 was the employer's, mainly because they're the only ones
20 that can control exposures --

21 Q. Right.

22 A. -- and people.

23 Q. So nothing, you're saying, here today addresses what
24 responsibilities Owens-Illinois would have; is that
25 correct?

1 MR. WATSON: Objection, Your Honor.

2 THE COURT: Well, I'll overrule the objection if
3 Dr. Gregory understands the question as posed; if not,
4 I'll ask Mr. McCoy to repose it; but let's find out.

5 A. I don't understand that question.

6 Q. Okay. What I wanted to know was if there's nothing
7 from an industrial hygiene perspective that would impose
8 any duties on a manufacturer back in that time frame,
9 then what you're saying here today doesn't relate to
10 Owens-Illinois's duties, right?

11 MR. WATSON: Objection, Your Honor. Vague.
12 Compound.

13 THE COURT: Well, again, let's see if
14 Dr. Gregory understands the question.

15 A. I still don't understand the question. If you can
16 break it down into segments because it sounds compound to
17 me.

18 Q. Okay. But what I'm trying to find out is, is it
19 your opinion then that Owens-Illinois had no industrial
20 hygiene responsibility for the products going out its
21 door?

22 A. The field of industrial hygiene is based on an
23 employer protecting their employees. And there were
24 industrial hygienists that could be hired back in that
25 time period, which like I said, Owens-Illinois had hired

1 their own industrial hygienist to protect their own
2 employees.

3 Q. Okay. And that was all Owens-Illinois was
4 responsible for was protecting their own employees, from
5 an industrial hygiene perspective, right?

6 A. As far as protecting employees from an industrial
7 hygiene perspective, that was the responsibility during
8 that time period.

9 Q. Okay. So Owens-Illinois had no responsibility to
10 the members of the Asbestos Workers Union for Kaylo; is
11 that right?

12 A. If Owens-Illinois knew something about asbestos that
13 the Asbestos Workers Union did not know, then
14 Owens-Illinois would -- it should have told the Asbestos
15 Workers Union. But the Asbestos Workers Union knew more
16 about the hazards of asbestos than Owens-Illinois.
17 Owens-Illinois was using an asbestos product just like
18 the asbestos insulators were using.

19 MR. MCCOY: Your Honor, I'll move to strike the
20 nonresponsive portion.

21 THE COURT: Actually, he responded exactly to
22 the question you just asked him, so I'm not going to
23 strike it.

24 BY MR. MCCOY:

25 Q. Okay. Doctor, when you say the Insulators Union

1 knew more -- okay. Did the Insulators Union have a
2 medical director?

3 A. I mean, they hired Irving Selikoff.

4 Q. But that was 1960, you said?

5 A. '60, I believe, yes.

6 Q. Okay. Did they have a medical director in 1946?

7 A. I don't know one way or the other.

8 Q. And did the Insulators Union have an industrial
9 hygienist on staff in 1946?

10 A. I don't know --

11 Q. Okay.

12 A. -- whether they did or not; but I know that the U.S.
13 Army, who built Badger, did in fact in 1943.

14 Q. Right. Okay. And if Owens-Illinois knew something
15 more about the dangers of Kaylo, then Owens-Illinois
16 should have told whoever would be its customers, right?

17 A. If they knew something different than what their
18 customers knew and if they knew that the use of their
19 product was going to cause asbestos-related diseases,
20 then they should have told those customers. But the
21 customers who were using the product knew as much, if not
22 more, about the potential hazards of asbestos than
23 Owens-Illinois knew.

24 Q. Okay. And the basis for your position is that
25 everybody knew about the TLV levels, right?

1 A. Well, they should have known. I mean, when you're
2 the U.S. Army with your own industrial laboratory in
3 Baltimore, Maryland in 1943; and, you know, the U.S. Army
4 got into industrial hygiene during World War I during the
5 use of gas warfare and they had a real strong incentive
6 to make sure they knew what was harmful to their
7 soldiers; and so they had a very good understanding of
8 TLVs.

9 Q. Okay. They understood the TLVs then; that's what
10 you're talking about?

11 A. Yes, they understood that. They understood the way
12 of controlling exposures to TLVs. They understood, since
13 they understood TLVs, they understood that overexposure
14 to asbestos could cause asbestos-related diseases.

15 Q. And the TLVs were related to asbestos exposures; is
16 that right?

17 A. In the earlier period, that's true.

18 Q. All right. And that's something that the companies
19 would have known about TLVs, right?

20 A. Yes. They should have known about that.

21 Q. All right. So -- and I want to show you a document
22 from the -- this is the *American Industrial Hygiene*
23 *Association Quarterly*. That's a respected journal in
24 your profession, right?

25 A. Yes.

1 Q. Okay.

2 THE COURT: Do we have a number?

3 MR. MCCOY: I don't have a number on this one,
4 Judge.

5 THE COURT: I think you've identified it with
6 sufficient specificity that we can find it later.

7 MR. MCCOY: Okay.

8 THE COURT: How about a date for that particular
9 issue?

10 MR. MCCOY: This particular issue is September
11 of 1956.

12 BY MR. MCCOY:

13 Q. And the document we're referring to here is a
14 prepared discussion by Herbert Stokinger, Chief
15 Toxicological Services, Public Health Services,
16 Cincinnati. Is that a person whose name you know?

17 A. Yes.

18 Q. He's a respected person in the field, right?

19 A. Yes.

20 Q. One of the primary people behind the TLVs, right?

21 A. He was on the TLV Committee for many years, yes.

22 Q. A leader on the committee, right?

23 A. Yes.

24 Q. Okay. This is page 285 of this *Industrial Hygiene*
25 *Quarterly*. I've highlighted just a section for

1 introduction. "As a member of the Threshold Limits
2 Committee, I was concerned over the statement and took
3 trouble to review each substance in the threshold limit
4 list for 1955 as to the basis for the choice of the
5 level."

6 And that's what you meant when you say Dr. Stokinger
7 was a leader, because he was always one of the people who
8 had the most questions, right?

9 A. He was one of the ones on the committee and he was a
10 chairman of the committee, yes.

11 Q. All right. The chairman. Okay. So in his prepared
12 discussion, he has a section here on levels for
13 cancerigen. That's what we now call *carcinogens*, right?

14 A. That's correct.

15 Q. And he says, "There is still one group of substances
16 for which some method should be devised for establishing
17 safe air standards - the industrial cancerigens. How
18 shall we establish the limits for this type of substance?
19 Thus far the question has been sidestepped completely.
20 As a result, with one exception, nickel carbonyl, limits
21 taking into consideration potential cancerigenicity have
22 not been assigned. Several industrial substances are
23 known or suspected cancerigens; many more are suspect on
24 the basis of animal experiments."

25 "As a suggested method of approach, the following is

1 offered: To the level judged safe for other types of
2 systemic injury, add a safety factor for carcinogenicity.
3 The magnitude of the safety factor is suggested to be
4 from 100 to 500."

5 So that means 100 to 500 times lower than if you
6 haven't the potential for carcinogenicity, right?

7 A. If it's a systemic injury-causing material.
8 Asbestos is not a systemic injury-causing material.

9 Q. But the damage is to breathing, the lung system?

10 A. Yes. But a systemic injury-causing material is
11 absorbed through the lungs and then carried to other
12 portions of the body, the target organs and what have
13 you -- like lead, arsenic, and many other things -- but
14 asbestos stays within the target organ of the lungs.

15 Q. Asbestos fibers are inhaled and transported to -- if
16 you've got, like, mesothelioma, they're being transported
17 into the lining of the lung, right?

18 A. They can be, they can, but it's still not considered
19 a systemic point in there. You know, the definition at
20 that time period was totally different.

21 Q. Okay. But it was known that asbestos fibers were
22 transported within the body, right?

23 A. During that time period, I don't know. I mean, it
24 was at that time period there had been a study in 1955 by
25 Sir Richard Doll that indicated that workers exposed to

1 asbestos had a high incidence rate of lung cancer.

2 Q. Right. And there had been reports in the literature
3 going back to the 1930s about getting cancer from
4 asbestos, right?

5 A. But none of them were conclusive and considered
6 valid. The 1955 was really the first conclusive
7 epidemiological study that indicated overexposure to
8 asbestos could be a cause of lung cancer.

9 Q. Right. In any event, the concerns of -- expressed
10 by Dr. Stokinger were for the suspected cancerigens,
11 right?

12 A. But he did not indicate asbestos and asbestos was
13 not a systemic material that could cause injury.

14 Q. He wasn't talking about any specific cancerigen; he
15 was talking generally about cancerigens, right?

16 A. Obviously not. And he was on the TLV Committee. If
17 he saw a reason to change that, he could have changed it,
18 and it was not changed.

19 Q. What I wanted to ask was did this information get
20 reported to the unions about the safety factors you have
21 of cancerigens?

22 A. I don't know if he communicated that information to
23 the unions or not. But the unions certainly had the TLVs
24 available to them.

25 Q. Right. But not the safety factor that was talked

1 about, they didn't know about that one, at least you
2 don't have any information about that, right?

3 A. Well, the safety factor was never implemented. To
4 my knowledge, it was never implemented, never accepted by
5 the scientific community. It was suggested there. But
6 apparently the committee, the ACGIH TLV Committee,
7 rejected it or never -- at least they never implemented
8 it.

9 Q. Okay. That's what -- let me put it this way: what
10 happened to asbestos was the TLV ultimately went down,
11 right?

12 A. Eventually, yes.

13 Q. And it went down by quite a factor, right?

14 A. No. Again from 1938 to 1969 it remained 5 million
15 particles per cubic foot. It was then proposed in '69 to
16 be dropped to 2 million particles per cubic foot.

17 Q. Right. And since that time it's gone down
18 considerably more, right?

19 A. Since OSHA promulgated their first standard in
20 1971 --

21 Q. Right.

22 A. -- it's gone down to 120-fold, that's correct.

23 Q. 120-fold?

24 A. Since 1971, because their standard was 12 fibers per
25 cc. Current standard, or their most recent standard in

1 1994, was .1 fibers per cc.

2 Q. Because it now takes into account cancer, right?

3 A. It has taken into account cancer since approximately
4 1964.

5 Q. Okay. So, in any event, what about Badger
6 Ordinance, was this information conveyed to Badger
7 Ordinance that there was a need for a safety factor for a
8 cancerigen in the time period of the 40s or 50s, do you
9 know?

10 A. Well, the facility was owned by the U.S. Army, who
11 had their own industrial hygiene laboratory. I don't
12 know for a fact whether they read that article. But as
13 an industrial hygienist, they would have had access to
14 that particular article.

15 Q. All right. And are you aware of any practices out
16 at Badger being followed where instead of following the
17 published TLV that they were following a safety factor of
18 a hundred to 500 times lower?

19 A. No. I have not seen any evidence of that.

20 Q. Okay. Are you aware of any document that
21 Owens-Illinois published as a manufacturer in connection
22 with its products that said if you're going to use the
23 TLV that you should consider a much -- a big safety
24 factor for the possible carcinogenicity?

25 A. I'm not aware of any manufacturing company that has

1 ever communicated or published that information about any
2 carcinogen --

3 Q. And --

4 A. -- or suspected carcinogen, for that matter.

5 Q. -- in terms of what capabilities a manufacturer of a
6 product does have, they're certainly in the best position
7 to let the people using their product know what's in it,
8 right?

9 A. As far as the contents, yes, the manufacturer has
10 the most knowledge of the contents of any product that
11 they manufacture.

12 Q. Did Owens-Illinois publish anything on its boxes to
13 say this has got a 15 to 25 percent asbestos content on
14 it?

15 A. I don't know of any manufacturer that published any
16 information about the percentage of asbestos in any of
17 their asbestos-containing products back during that time
18 period.

19 Q. Right. Okay. And, also, a manufacturer is in a
20 position to test its product for safety purposes as
21 certainly as well as anybody, right?

22 A. You need to define what you mean by "safety
23 purposes" because I don't quite understand that.

24 Q. Well --

25 A. If you're talking about exposure, only the employer

1 is in the best position to measure their employees'
2 exposure to any given product containing asbestos, not
3 the manufacturer. The manufacturer can't even get on the
4 jobsite without special permission.

5 Q. I understand. The information that the manufacturer
6 can generate is by simulating the field exposures, right,
7 before the product is sold; they can do that?

8 A. No. They cannot do that with any kind of scientific
9 validity or reliability, of course not.

10 Q. It's impossible for manufacturers to simulate those
11 conditions?

12 A. Virtually impossible unless they went out and did
13 the same insulation job at the same facility during the
14 same environmental conditions that the contractor was
15 using the product in, which is highly unlikely.

16 Q. All right. I mean, it's possible that
17 Owens-Illinois could have given somebody a saw and said,
18 "Okay, cut some Kaylo," and had different kinds of wind
19 or air conditions when that was being done, right; they
20 could have done that?

21 A. It would have made no sense from an industrial
22 hygiene standpoint because --

23 Q. I understand.

24 A. -- you're not in the environment where the insulator
25 is, you don't know how often it's being cut, you don't

1 know how much is being cut, you don't know how many
2 others are cutting it around you.

3 So, no, the manufacturer really can't represent the
4 exposure in the workplace. Only the employer and the
5 jobsite controller can do that through industrial hygiene
6 sampling.

7 Q. And a manufacturer could send some of its people
8 out, if it's got an industrial hygienist who knows about
9 sampling techniques, into the field to take measurements;
10 they can do that, right?

11 A. If they could get permission to go on site. I've
12 never seen permission given to a manufacturer in that
13 time period. I mean, to go on a U.S. Army ammunition
14 construction site, it's going to take special security
15 clearance back during the time period when we're fighting
16 the Nazis in Europe. So I can't imagine that you would
17 ever get clearance to do that; I mean, let's put it that
18 way.

19 Q. So that doesn't make any sense either for a
20 manufacturer to be doing that, right, asking permission?

21 A. It's up to the employer, the jobsite owner. Even if
22 a manufacturer goes out and does it, the manufacturer has
23 no control over putting the hierarchy of control measures
24 into effect to reduce that employee's exposure. All it
25 is is a bunch of numbers that no one reacts to because

1 only the employer has the ability, the resources, the
2 responsibility and the authority to put in controls to
3 reduce their employees' exposures to asbestos-containing
4 products, because they control the workplace, they
5 control the employee.

6 Q. Right. And as far as what you said about this; that
7 the testimony you've read in this case was that very few
8 of these insulators, even as late as when the Selikoff
9 survey went out in 1969, were wearing respirators, right?

10 A. That's correct, based on that questionnaire.

11 Q. And that was even true that the companies who were
12 running the insulation companies like the one that you
13 said a Mr. Van Beck worked for that they also knew that
14 respirators were not being worn, right?

15 A. Yes, they did.

16 Q. And so in terms of what was known to the property
17 owners or what the property owners did, maybe let's
18 ask -- let's do that; in terms of what the property
19 owners did or the employers did, the evidence that you've
20 seen is that whatever it was, it didn't work as far as
21 getting people to wear masks, right?

22 A. Based on that survey and based on the depositions,
23 very few people were wearing the respirators.

24 Q. And that's an important thing in the field of
25 industrial hygiene that you motivate the employees to do,

1 the workers, to use the necessary protective measures,
2 right?

3 A. Yes, it is.

4 Q. Okay. So now what I want to ask about briefly is in
5 terms of your actual knowledge at Badger -- one moment.
6 I'll be right back.

7 A. Sure.

8 Q. You never visited the Badger jobsite, right?

9 A. No, I have not.

10 Q. Did you actually interview everybody who's worked at
11 Badger -- anybody who worked at Badger, I should say?

12 A. No, I have not.

13 Q. Did you interview anybody from Owens-Illinois about
14 what the practices were at Owens-Illinois for Kaylo?

15 A. No, I've not interviewed. I mean, I've read
16 depositions from Owens-Illinois employees and management
17 personnel, but I haven't interviewed them.

18 Q. Okay. And I take it you haven't interviewed anybody
19 from the Insulators Union back in the 40s and 50s about
20 their knowledge of asbestos hazards beyond what you saw
21 in the journals, right?

22 A. That's correct. I mean, I've read a lot of
23 depositions from insulators and, you know, I have a good
24 understanding of their knowledge, but I didn't interview
25 any of them.

1 Q. Okay. I want to address again the idea of testing a
2 product for a moment. Are you saying that an employer
3 has no responsibility -- I'm sorry, that a manufacturer
4 has no responsibility for testing the product, before it
5 goes out the door, for safety purposes, from an
6 industrial hygiene perspective?

7 A. Well, during that time period there were no
8 requirements that companies publish any kind of
9 information about their product. In 1983 OSHA passed the
10 material safety data sheet or Hazard Communication
11 Standard that required that manufacturers and
12 distributors generate material safety data sheets that
13 included potential safety and health hazards as well as
14 the ingredients of all products that are manufactured and
15 sold to customers or distributed to customers.

16 Q. That's a legal requirement?

17 A. That is, as of 1983, yes.

18 Q. So again are you saying that as an industrial
19 hygienist, there was no responsibilities for testing the
20 product of the manufacturer back in the 40s and 50s?

21 A. In this particular situation Owens-Illinois was
22 using asbestos to make an asbestos-containing product,
23 like many other manufacturers during that time period.
24 They knew, like all other users, that overexposure to
25 asbestos caused asbestosis. So there was no reason to

1 test the product. They couldn't add any further
2 information to what was already known about the potential
3 hazards of asbestos.

4 And they weren't the ones that were using the
5 product. The insulators, the site controllers and
6 employers were using the products. They're the ones that
7 had the control over the working conditions and the
8 personnel and they're the ones that had the ability to
9 prevent overexposures to a known asbestos type of hazard.

10 Q. Okay. So there wasn't any responsibility on
11 Owens-Illinois to conduct any further testing --

12 THE COURT: Mr. McCoy, we're rephrasing this
13 ground for the third time. Do you have any new topics?

14 MR. MCCOY: Okay. I'll move on, Judge.

15 BY MR. MCCOY:

16 Q. At Badger Ordinance do you know how much pipe
17 covering was replaced on the jobs described by
18 Mr. Suoja's co-workers because the piping itself was
19 leaking or had deteriorated or needed to be checked?

20 A. I don't know how much. I mean, Mr. Schlub indicated
21 that there were, I believe he indicated, thousands of
22 linear feet of material that was recovered because it was
23 deteriorated and damaged.

24 Q. My question is do you know how much was replaced
25 because the piping underneath was bad and needed to be

1 replaced or needed to be tested, how much of the
2 insulation was replaced because the piping underneath was
3 bad?

4 A. No, I don't.

5 Q. And do you know how much of the pipe covering was
6 taken off and replaced at Badger on these jobs because
7 there was a need to reroute pipelines at Badger?

8 A. I mean, I don't know the exact details of how much
9 was replaced or recovered or anything like that. When
10 Mr. Schlub was there in, he indicated, '67, that was
11 right during the Vietnam War. And I imagine that they
12 were -- you know, the whole plant had been reactivated to
13 supply ammunition for the Vietnam War.

14 Q. Okay. And do you have any idea as to the levels of
15 dust that were present when the conditions at Badger were
16 described as *dusty* during the insulators' work?

17 A. No. That's impossible to determine because
18 Mr. Schlub indicated that 99% of the pipe insulation that
19 was removed or replaced was outdoors. And you don't know
20 the wind conditions during that time period or anything
21 like that, so you really don't know what the levels of
22 exposure were. The only one that would know that would
23 be someone that did the monitoring, that had the ability
24 to do the monitoring and the authority and the
25 responsibility, which would have been the employer, the

1 site controller or the site owner.

2 Q. And there's no indication in any of the co-worker
3 testimony that someone was actually out there with a
4 monitor determining what the air levels were for asbestos
5 or general dust?

6 A. No. I didn't see any indication that there was any
7 monitoring performed.

8 Q. And did you see any procedures that Badger actually
9 had at its facility, in its safety manual or any document
10 specific to Badger, that said this is how and when air
11 monitoring should be conducted for removal of insulation,
12 back in that time period of the 40s and 50s?

13 A. I didn't see anything in there, but they certainly
14 had the responsibility under the Walsh-Healey Act.

15 Q. Did you see any procedures or manuals, I should say
16 instructions or manuals, directing about how that
17 hierarchy you talked about of the engineering and
18 administrative and personal protection controls should be
19 applied at Badger for that kind of work?

20 A. No, but it's included in a general format in the
21 Wisconsin Industrial Commission regulation involving
22 asbestos and many other air contaminants. They cover
23 hierarchy of control. They don't call it that, but they
24 talk about ventilation, personal protective equipment and
25 administration control.

1 Also, the Walsh-Healey Act does the same thing. And
2 the Walsh-Healey Act, the first one was in 1942. They
3 covered those types of controls.

4 Q. Right. So did you see any evidence that there was
5 actually implementation of these Wisconsin TLVs and those
6 standards at Badger during the time when the co-workers
7 were testifying?

8 A. I didn't see any specific written information
9 indicating that they were complying with regulations that
10 they were required to comply with, which includes the
11 Walsh-Healey Act and the Wisconsin Industrial Commission
12 regulations pertaining to asbestos.

13 Q. And are you aware of any warnings going out on the
14 Kaylo boxes about needing to comply with the regulations?

15 A. I'm not aware of any warnings. And warnings on a
16 box would not have anything to do with whether or not
17 someone was going to implement engineering controls
18 because only the employer, the site owner and the
19 controller can implement engineering controls. A warning
20 on a box just doesn't control exposures.

21 Q. Okay.

22 A. And there were no boxes. I saw no evidence that
23 there were any Owens-Illinois boxes at that site.

24 Q. I see. And the Wisconsin Industrial Commission, you
25 mentioned, was active in investigating jobsites, right?

1 A. That's correct.

2 Q. Okay. Was there any evidence that the Wisconsin
3 Industrial Commission was out at Badger in this time
4 period?

5 A. I didn't see that kind of evidence. That's very
6 detailed evidence. You would have to go to the Wisconsin
7 Board of Health Industrial Hygiene Unit and see if they
8 have those kind of records that go back to that time
9 period, and it's unlikely that they have those records.

10 Q. I see. Did you see any of the testimony that there
11 was only two jobsites in total that the State of
12 Wisconsin investigated before the mid 1950s?

13 A. Oh, I'm sure they investigated more than two
14 jobsites, otherwise they wouldn't have a job. I don't
15 know what they did the rest of the time, in other words.

16 Q. I just wondered if you'd --

17 A. I was only with OSHA seven years. I investigated
18 450 jobsites.

19 Q. All right. So -- okay. Take a moment. I'm getting
20 done here. Let me ask a couple more questions. Hold
21 that before we turn it on. Okay.

22 Did you have any personal, formal training in the
23 different types of pipe covering that were sold in the
24 40s and 50s in terms of looking at these and knowing what
25 differences might exist in textures and colors and so on;

1 did you have that kind of training?

2 A. Well, based on all the depositions and documents and
3 product bulletins that I've reviewed and the
4 asbestos-containing insulation that I've observed at
5 plants that I've worked at, I have a working knowledge of
6 what the asbestos-containing insulation products looked
7 like during that time period.

8 Q. Okay. But had you looked at the different brands
9 carefully enough, used many many times, and gotten formal
10 training about any sight differences in color and
11 textures and so on?

12 A. I just read depositions of different insulators who
13 have reported the different textures and the ones that
14 they liked the best for the reasons that they liked the
15 best.

16 Q. Right. And they're -- okay. And in there they're
17 describing what they know is colors and textures and so
18 on; that's reasons why they prefer certain ones, right?

19 A. Well, it varied. I mean, some of them didn't like a
20 product because it cracked easily --

21 Q. Right.

22 A. -- broke easily. Others liked it because it was
23 stiffer, less friable. And so it varied depending upon
24 the particular product.

25 Q. Right. They are expressing their preferences and

1 the differences on the products, right?

2 A. That's correct.

3 Q. Okay. Now, I wanted to show you a document that
4 we've used. And this is -- this is a document that's
5 titled at the top, *Have All These Advantages?* This is an
6 Owens-Illinois Kaylo promotional literature piece.

7 MR. WATSON: Can we have an exhibit number, Your
8 Honor?

9 THE COURT: Of course. Do you want to put a
10 number on it?

11 MR. MCCOY: I think we have one on our exhibit
12 list.

13 MR. HAUSMAN: It's part of 136, but we could
14 give it a separate number.

15 THE COURT: As long as we know where to find it
16 later.

17 MR. HAUSMAN: Let's give it 138 by itself.

18 MR. MCCOY: This will be Exhibit 138.

19 BY MR. MCCOY:

20 Q. So it's titled *Have All These advantages?* And it's
21 a Kaylo -- at the bottom, "First in calcium silicate.
22 Pioneered by Owens-Illinois Glass Company." And I wanted
23 to direct your attention to this. Okay. It says in
24 here, "ease of cutting and fitting." Do you see that
25 statement there?

1 A. Yes, I do.

2 Q. Okay. And it says, "Ordinary tools of the trade are
3 used to install Kaylo heat insulation. The material is
4 non-irritating to the skin and non-toxic." So that is a
5 communication by the manufacturer about its product
6 safety, right?

7 A. That's correct.

8 Q. Okay.

9 A. During that time period it was considered nontoxic.
10 The definition of *toxicity* changed in the 1960s.
11 Toxicity was only those materials that caused systemic
12 poisoning or damage to the body, like lead, arsenic and
13 things that you inhale or ingest and then they travel
14 systemically throughout the body and cause their damage.

15 Asbestos was not considered a toxic material until
16 that definition changed in the 1960s. In fact the ACGIH
17 TLVs listed it as a mineral dust. They didn't list it as
18 a toxic dust. And all the textbooks during that time
19 period listed it as a mineral dust, not a toxic dust,
20 because of the definition that was used for *toxicity*
21 versus *nontoxicity* in the field of toxicology.

22 Q. Yeah. That's your explanation here. And you're not
23 a medical doctor, right?

24 A. I'm an industrial hygienist and I know the
25 difference between *toxicity* and *nontoxicity* and I have

1 read many of those old textbooks.

2 Q. But for the *average Joe*, looking at such an
3 advertisement, *toxic* and *nontoxic* mean other things than
4 your industrial hygiene analogies, right?

5 THE COURT: Mr. McCoy --

6 MR. WATSON: Objection, Your Honor.

7 THE COURT: -- I'll give you ten more minutes
8 because I don't know how this helps you prove liability
9 here.

10 MR. WATSON: And, for the record, Your Honor,
11 objection as to foundation and speculation as to the
12 *average Joe*.

13 THE COURT: Well, let's just move on. I'm not
14 seeing the relevance here. I'll give you ten more
15 minutes, okay? You use it however you choose. But at
16 five to, you're done.

17 MR. MCCOY: Okay. All right. We'll take that
18 one off.

19 MR. CASMERE: Is it appropriate to ask, under
20 the rule of completeness, to direct the witness to Item
21 No. 4 on that?

22 THE COURT: No. I think he answered that
23 question pretty thoroughly.

24 MR. CASMERE: Okay.

25

1 BY MR. MCCOY:

2 Q. In terms of a company like Owens-Illinois, and let's
3 assume for a moment they had information about the
4 product's exposures that were very high, in excess of the
5 5 million particles per cubic foot.

6 A. So you're asking me to assume facts that haven't
7 been established or not in evidence, in other words?

8 Q. I'm asking you to assume those facts.

9 A. You're asking me to take a very unscientific
10 approach?

11 THE COURT: Let's consider it a hypothetical;
12 how's that?

13 A. Okay. Go ahead. Repeat that again. I'm sorry.

14 Q. So let's assume that Owens-Illinois had information
15 about the product that it was selling creating very high
16 exposures above what would be the 5 million particle per
17 cubic foot range. What -- would you agree that
18 Owens-Illinois was in a position where it could have
19 provided that information to others outside of the
20 company?

21 A. Well, you're asking me to assume that Owens-Illinois
22 knew the exposure levels at the Badger facility to
23 insulators, which I don't know how they would have known
24 that, but you're asking me to assume that they had
25 information that those employees were overexposed,

1 correct; is that what you're asking me to assume?

2 Q. If you assume that that -- right, that those levels
3 were the same as what would happen at Badger, and
4 Owens-Illinois knew about that and that they were above
5 the TLV, then that would be some information that
6 Owens-Illinois should convey to the customers, right?

7 MR. WATSON: Objection, Your Honor. Form.
8 Foundation. Incomplete hypothetical.

9 THE COURT: Yes. That hypothetical is just a
10 mess. Please move on. He doesn't have to answer that.
11 That's got no bearing on what we're doing here.

12 MR. MCCOY: Okay. All right.

13 BY MR. MCCOY:

14 Q. The data that a manufacturer has that shows that its
15 product has dangers, that information should be provided
16 to the customers, right?

17 MR. WATSON: Objection. Asked and answer, Your
18 Honor, for the third time.

19 THE COURT: Right. This is the ground reploved
20 three times. We're not going to do it four. Find a new
21 topic, please. You've got seven minutes left.

22 MR. MCCOY: All right. Judge, if that's been
23 plowed, then that's all the questions I've got.

24 THE COURT: As you wish. Do you wish to
25 redirect.

1 MR. WATSON: One thing on redirect, Your Honor.

2 THE COURT: I'm not going to limit you at this
3 point.

4 REDIRECT EXAMINATION

5 BY MR. WATSON:

6 Q. Dr. Gregory, Mr. McCoy directed you to an industrial
7 hygiene publication earlier; is that right?

8 A. That's correct.

9 Q. He directed you to remarks of Dr. Stokinger; is that
10 right?

11 A. That's correct.

12 Q. Dr. Stokinger's remarks, later in that same 1956
13 document, which we can identify as Owens-Illinois Exhibit
14 1944, reflect the fact that Dr. Stokinger could not
15 conclude that asbestos was a cancerigen, right?

16 A. I didn't read the rest of that article. I just saw
17 the part that he had highlighted.

18 THE COURT: If you just want to put the article
19 in as an exhibit, then it's part of the record.

20 MR. WATSON: Okay.

21 MR. CASMERE: We'll do that.

22 MR. WATSON: We'll do that, Your Honor. We'll
23 offer at the appropriate time Owens-Illinois 1944, which
24 is the Industrial Hygiene Quarterly publication,
25 September 1956.

1 THE COURT: Understood. And again, this is just
2 another example of the benefit of a bench trial versus a
3 jury trial: you don't have to clean that up now because
4 the jury is not going to go home with the misimpression.
5 The Court has the ability to read the article later.

6 MR. WATSON: And with that, Your Honor, no more
7 questions.

8 THE COURT: Very well. Dr. Gregory, you're
9 done. You're free to go about your business.

10 THE WITNESS: Thank you.

11 THE COURT: You have a safe trip home.

12 THE WITNESS: Thank you, very much.

13 THE COURT: So where do we find ourselves with
14 regard to the defendant's case?

15 MR. CASMERE: With the same stipulation, Your
16 Honor, that we're going to work out the and submit the
17 exhibits and the deposition designations, we have no more
18 live witnesses.

19 THE COURT: If you want to reoffer your Rule 50
20 motion, why don't you do that tomorrow morning after the
21 exhibits come in; how does that sound?

22 MR. WATSON: Sounds fair, Your Honor.

23 MR. CASMERE: But subject to that, we will rest.

24 THE COURT: And that is the set of conditions to
25 which the parties previously agreed. It is a two-way

1 street. It applies with equal force to the defendant.

2 Mr. McCoy, I can predict the answer to this question
3 but I want to ask it to complete the record: do you have
4 any rebuttal evidence at this time?

5 MR. MCCOY: No rebuttal evidence.

6 THE COURT: Very well. Then let's just make
7 sure that we leave today on the same page collectively.
8 We'll adjourn for tonight. We will reconvene tomorrow
9 morning at nine. The agenda tomorrow morning is for the
10 parties to present to the Court their exhibits.

11 And there may be three columns here -- it's perhaps
12 a Venn diagram -- where there is a group of exhibits to
13 which both sides agree they can come in, depending -- it
14 doesn't matter who offered them. A lot of these exhibits
15 were offered by both sides. There will probably be some
16 exhibits that the plaintiff wishes to offer that -- to
17 which the defendant objects. There may be some exhibits
18 to which the defendant -- which the defendant wishes to
19 offer to which the plaintiff objects. You will make that
20 clear to the Court tomorrow. Once we've done that, we
21 will close the evidentiary record and end the bench
22 trial, qua bench trial, and set the briefing schedule for
23 what follows.

24 And again, so it's clear: although we're ending the
25 bench trial, the Court is reserving ruling on evidentiary

1 objections, including striking portions of testimony
2 subject to the parties' briefing of those topics. And
3 that will all be made as clear as the Court can make it
4 in its order on the bench trial.

5 Mr. McCoy, does that comport with your understanding
6 of where we are and where we're headed?

7 MR. MCCOY: Yes, Judge.

8 THE COURT: Very well. Mr. Casmere, does that
9 comport with your understanding of where we are and where
10 we're headed?

11 MR. CASMERE: Yes, Your Honor.

12 THE COURT: Mr. McCoy, anything else this
13 afternoon before we adjourn?

14 MR. MCCOY: No.

15 THE COURT: Anything else on behalf of
16 Owens-Illinois before we adjourn?

17 MR. CASMERE: No. No, Your Honor.

18 THE COURT: Very well. Then we're done.

19 (Adjourned at 4:57 p.m.)

20 ***

21

22

23

24

25

1 I, CHERYL A. SEEMAN, Certified Realtime and
2 Merit Reporter, in and for the State of Wisconsin,
3 certify that the foregoing is a true and accurate record
4 of the proceedings held on the 1st day of December, 2015,
5 before Magistrate Judge Stephen L. Crocker, of the
6 Western District of Wisconsin, in my presence and reduced
7 to writing in accordance with my stenographic notes made
8 at said time and place.

9 Dated this 21st day of December, 2015.

10
11
12
13
14
15 _____ /s/

16 Cheryl A. Seeman, RMR, CRR
17 Federal Court Reporter
18
19
20
21

22 The foregoing certification of this transcript does not
23 apply to any reproduction of the same by any means unless
24 under the direct control and/or direction of the
25 certifying reporter.